ST/ESA/SER.R/26

NATIONAL EXPERIENCE IN THE FORMULATION AND IMPLEMENTATION OF POPULATION POLICY, 1960-1976

YEMEN

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Department of International Economic and Social Affairs

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New York, 1978

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PREFACE

Since the World Population Conference was held under the auspices of the United Nations in 1974, there has been growing interest among policy makers in the complex relationships between population and development, with the area of population policy being one of increasing concern.

The following study is one of a series of reports prepared during 1975 and 1976 by the Population Division of the Department of International Economic and Social Affairs of the United Nations Secretariat, in an attempt to disseminate information among interested Governments and scholars on the experience of various Governments in formulating and implementing population policies. It is intended that the series, when completed, will include all countries in the world and will examine the variety of situations and solutions adopted by Governments, which have often been determined by particular historical, political, socio-economic or cultural circumstances. The information included in the series would be useful to the national bodies assisting Governments in the area of population and related fields, as well as to the international organizations which are attempting to increase the knowledge of ways in which Governments may most effectively resolve problems associated with population.

Although the reports have been prepared with all possible care, there may possibly be errors or omissions. Comments or corrections from Governments would be appreciated.

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INTRODUCTORY NOTE

Until 1953 the Yemen Arab Republic was almost completely traditional in the form of its societal organization and technology, although, through the large numbers of emigrants dispersed through many parts of the Middle East and North-East Africa and beyond, there were considerable contacts outside the country. After 1953 some very limited organizational changes were started, but it was only in 1962, after a revolution which replaced the Imamate with a republican form of government, that there was any substantial modernization. During the period 1962-1969 a civil war seriously constrained permanent institution-building and the implementation of substantial development programmes, although the disruption involved, including the entry of an Egyptian army, may have brought about substantial changes in attitudes. The first period defined for the purpose of this study, 1960-1969, includes these years of initial change and serves also as a means of identifying the traditional base from which recent development has occurred. The year 1960 saw the beginning of the First United Nations Development Decade and has been adopted for each of the country studies in this series. By 1969 the civil war had drawn to a close, and during 1970 stability was reinstated. The period 1969-1976, the second period defined for purposes of the study, has witnessed very rapid progress in institution-building and in the implementation of widespread and substantial development programmes.

I. THE PERIOD 1960-1969

The political and economic situation

Until 1948 the Imam Yahya had maintained a severely conservative and isolationist policy, but this had been to a certain extent modified by his son and successor, the Imam Abdullah. From 1953 diplomatic and development assistance relationships were developed with a number of Arab and other countries but the considerable tension between the Government and the British administration of the Aden Protectorate hindered the development of international assistance programmes and full involvement in the international community. In March 1961 an attempt was made to assassinate the Imam, who died in September 1962. His son and successor was removed shortly afterwards by a military coup d'état which was quickly supported by troops from the United Arab Republic (Egypt). In spite of attempted cease-fire agreements in 1964 and 1965, fighting continued between the new republican Government, recognized by the United Nations, and royalist tribesmen. In March 1970 a peace agreement was reached, and in May royalists returned to Sana'a to join the Government. In December a new constitution was promulgated.

In the first comprehensive study of the country's underdevelopment undertaken by a Yemeni, and published in 1964, it was considered that, although Yemen had suffered to a certain extent from colonial economic domination from Democratic Yemen, the causes of its underdevelopment were different from the colonial type. The exploitive system of the Imamate was considered the fundamental cause of a recent progressive deterioration in economic and social conditions; at the time of the 1962 revolution the Government was faced with a disastrous economic and financial situation.

Development planning

Except for limited technical assistance which had been provided in 1951, very limited modern development activities occurred before the 1962 revolution. In the first comprehensive study of the country's underdevelopment, published after the 1962 revolution by the first Director-General of the Yemen Reconstruction and Development Bank, it was reported that until that date no economic or sociological study had been made of the country. The lack of statistical information and severe constraints upon entry of foreigners had been serious obstacles. In 1955 an FAO mission had visited the country, but its report had not been published until 1960 because of constraints imposed by the Imam. A French engineering specialist acted as adviser to the Government in the late 1950s, principally in regard to improvement of basic economic infrastructure.

Within a few weeks of the 1962 revolution an economic commission and the Yemen Reconstruction and Development Bank were established. Although the revolutionary movement lacked a basic economic platform, a number of provisional measures were taken, and in April 1963 a provisional constitution was promulgated. This proclaimed, among other things, that the national economy was to be organized by means of plans established according to the principles of social justice, with the objectives of increased production and rising standards of living. Until a planning organization could be established, the Yemen Reconstruction and Development Bank was to act as a responsible organ for the Government's economic policy. In 1963 a Presidential Decree (No. 29) was issued concerning the organization of the Ministry of Economy. A policy statement in 1964 announced a programme of education and health service expansion. However, until 1969 the central administration was paralysed by the civil war.

In 1966 the Government reported at an International Symposium on Industrial Development in the Arab Countries that the revolution of September 1962 had marked a most important change in its approach to development; previously the Government had maintained a closed economy. In 1966 no official development programme or plan had yet been formulated. However, "realizing the necessity of planned development in all aspects of the country's economic and social life" the Government had already called upon foreign advisers. A number of major projects in agriculture, transport and communications and urban water and electricity supplies had been begun or proposed by friendly Governments. In 1965 a technical office had been organized in the Ministry of Economy to deal with statistics, planning and financing, and had been charged with investigating the economic situation and suggesting measures for resolving problems of implementation.

Information on the general demographic situation and trends

The absence of economic and demographic studies prior to the 1962 revolution was subsequently ascribed in part to lack of statistical information. In 1962 a United Nations specialist reported that no organized research or statistical services existed in any of the government ministries, but that a statistical office had recently been established in the Ministry of Economy. In 1964 the Director General of the Yemen Reconstruction and Development Bank stated that there existed no organization responsible for statistics, and no published statistics. The only statistical material was fiscal, and sufficient only for very general indications of the situation. The situation with regard to demographic statistics was even worse. An initial estimate of demographic trends had been prepared on the basis of the estimates prepared from a 1955 census of the area, with allowances for the higher level of health status in Democratic Yemen relative to Yemen. However, at the time of the 1962 revolution there was no

possibility of knowing the economic or demographic situation of the country. The formulation of a provisional development plan had been seriously constrained by the absence of statistical data, and in particular the lack of an administrative system capable of providing data. Although this scarcity could not be allowed to prevent the formulation of preliminary measures, the establishment of a statistical organization, and the priority development of a programme of research and data collection was considered essential. Thus, the first step had to be the formation of an institution responsible for data collection.

In 1965 a technical office in the Ministry of Economy was organized, to be responsible for statistical services as well as planning. In 1967 a presidential decree (No. 6) was issued concerning the establishment within the Ministry of Finance, Economy and Supply of a central office of statistics. This was to be responsible for taking a population census among other statistical collecting programmes, statistical studies and research, and was to be the sole publishing agency, to be provided with required information by all other ministries and agencies. However, it could not begin to operate because of shortage of staff and funds. In 1970 a United Nations project was implemented to organize the office, establish statistical units within ministries, train staff and co-ordinate activities with the object of publishing a statistical yearbook. The office was to be of the central planning organization in the Prime Minister's Office. As a result, in 1971 a Statistical Yearbook was published for the first time.

General policy with regard to the demographic situation and trends

Because of the very limited capacity of the Government's planning institutions, the scarcity of data, and preoccupation with the civil war, no statement of population policy was made. The Government did not reply to the First United Nations Population Inquiry among Governments on problems resulting from the interaction of economic development and population change, transmitted during 1963. A comprehensive summary of demographic information, identification of problems, and discussion of policy options appeared in the study made by the first Director of the Yemen Reconstruction and Development Bank and published in 1964.

Size and growth of population

Information available to the Government

Information on the size of total population had been based upon estimates derived from taxation records, as no census was taken. Usually they did not indicate if the reference was de jure or de facto

totals. In 1947 a survey of the country published in New York had reported a total population between 3 million and 5 million, with 4 million being "probably not far from the truth". In the same year an Italian study had stated that a "mere approximation" based on administrative statistics indicated a total of about 5 million. In 1952 it was reported in a general study prepared by a foreign observer with a long-standing association with the Imamate and published in Cairo that the Imam Yahya had maintained careful accounts for financial purposes, and that a total population of 4.069 million was indicated. However, the Imam himself had estimated a total of 8.0 million--this being considered by the reporter to have been a rather optimistic estimate. It was noted that an Egyptian estimate in 1948 had given a total of 3.5 million. In 1955 a foreign official had stated that the population did not exceed 3.0 million, although this could be only an approximation. It may be presumed that these estimates referred to a de jure population.

In 1962 a United Nations specialist stated that population growth had probably remained static for some time as a result of very high mortality levels and emigration, and that it was possible that an actual decline had occurred. The effect of high mortality during the period of military action during the 1960s is unknown.

In 1964 the first Director General of the Yemen Reconstruction and Development Bank, in his review of the economic and social development of the country, noted that in 1949 the United Nations Statistical Yearbook (Demographic Yearbook) had reported a total population of 4.5 million, on the basis of the Government's fiscal accounts, the only available statistical source in the country. The previous Government had claimed a total of 9.0 million, but the author considered the United Nations estimate more reliable. He considered that during this early period the current average annual rate of population growth had been at least 1.85 per cent, and the population in 1954 was estimated at 5.4 million on this basis. Natural increase rates were presented which were derived from incomplete crude birth and crude death rates. Thus, for 1950 crude birth rates were reported as 23.9 per thousand, and crude death rates as 16.4, with a rate of natural increase of 0.75 per cent. In 1958 the crude birth rate had increased to 36.7 per thousand, and the crude death rate had fallen to 12.4 per thousand, with a natural increase rate of 2.43 per cent, which was considered a not improbable rate. However, in a discussion of current levels of unemployment in the same survey, it was reported that the adult population "must be about 4,140,000". If the adult population represented 65 per cent of the total, this must have been 6.37 million; if only 60 per cent, the total must have been 6.90 million. These probably referred to a de jure population.

In its Statistical Yearbook published in September 1971, the Government reported an estimated total de jure population of 5.134 million in 1965, and average annual rates of growth of 2.21 per cent during the subsequent five-year period. In a report on development

problems in selected countries of the Middle East prepared by UNESOB and published in 1972, end of year adjusted total de jure populations of 5.128 million for 1965, and 5.660 million for 1969 were indicated.

Government perception of size and growth
in relation to development objectives

Two factors were relevant to the formulation of the Government's perception: the currently usable and potentially usable natural resources; and the level of unemployment and underemployment. Each was subject to some qualification based on the availability of information and the definitions chosen.

In 1955 it had been reported by a foreign official that the country had "vast possibilities. Its agricultural potential alone is immense". A report on an FAO mission in 1955 which had been published in 1960 noted that the country was largely self-sufficient in food, and that large potential resources for agricultural production were untapped, "though there is striking evidence of the existence, in years gone by, of an advanced agricultural system which even the ravages of centuries have not been able to eradicate...Yemen is probably one of the best terraced countries in the world.

In a review of modern infrastructure and development potential published in 1960, a French engineer who had acted as adviser to the Government during the late 1950s stated that, after appropriate investment, the potentially irrigable area was capable of supporting a total population of about 15 million.

After the 1962 revolution, the Director General of the Yemen Bank for Reconstruction and Development, the agency then responsible for development planning, stated that no precise data on the area then utilized was available. An estimate of 3 million hectares, 15 per cent of the total area, had been made, which represented an area per person of 0.58 hectares. It was considered that only half of this was actually cultivated. Although stating that some observers considered that no further land remained available for an extension of cultivation, the Director General considered that the estimate made by some experts that not only the full 3 million hectares, but double that area, could be cultivated, was probably correct. However, he admitted that this was a long-term and major task. The availability of water was not considered a major problem, given the rainfall and artesian resources. The major restraints upon current agricultural productivity were technological and organizational. Deforestation was occurring at a dangerous pace, but substantial areas were capable of reforestation. Thus, on the basis of reports by a French engineer, a United Nations specialist, a mission from FAO in 1955 and post-revolution missions from the Federal Republic of Germany, Czechoslovakia, the Union of Soviet Socialist Republics and the United States of America, the Director General stated that the potential in natural resources was considerable.

In 1947 it had been reported that, whereas until 1938 the "excess" population which had resulted from high birth rates and low death rates had been absorbed by neighbouring countries, the Imam's decree of 1938, which had forbidden further emigration, had created "a problem of the first magnitude". The time would come when it would be "absolutely necessary for the excess population to be absorbed by neighbouring countries, of which Saudi Arabia offered a considerable possibility". In 1950 the Government had informed the Secretary-General of the United Nations that, although official statistics were lacking, it was known that in drought years there was considerable unemployment. In any case, contemporary conditions of agriculture and irrigation were such as to constrain provision of sufficient work. In 1954 the Government had informed the United Nations that essentially the same conditions existed, although some improvements had been made.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development stated that urban unemployment was considerable, including frictional unemployment among males, a high proportion of urban females, large numbers of beggars, and also considerable numbers of persons, particularly of the upper class, who did not work. However, such unemployment appeared to be less significant than underemployment. In rural areas, seasonal unemployment was widespread, yet less severe than in some underdeveloped countries because several harvests per year were gathered, and terrace culture required almost constant work, as did the irrigation works. Traditional techniques of construction, service provision and small-scale industries in urban areas were also labour intensive. Disguised unemployment was widespread because of the low level of technology. Shortage of lands made it necessary for young peasants to work on the holdings of parents, resulting in an excess of labourers per unit of production. Disguised unemployment was very considerable also in urban centres. Finally, the loss of production which resulted from use of khat (a narcotic drug) was very great. In a communication presented by the Government to the International Symposium on Industrial Development in the Arab Countries held in Kuwait in March 1966, it was stated that the country still "imports goods involving a good deal of labour, and has to pay for foreign labour while the number of unemployed is large at home".

In 1964 the Director General of the Yemen Bank for Reconstruction and Development, having pointed out that the estimate of a rate of natural increase in 1958 of 2.43 per cent was not improbable, stated that this could be described as a "demographic explosion" and asked rhetorically if the country were not overpopulated. He noted that some commentators had stated that it was in fact overpopulated and had suggested that a policy of birth control be adopted. Others had stated the opposite, presenting the argument that the country had considerable potential for development. It was his own opinion that the proper position needed careful consideration. In the actual economic and social conditions there was no doubt that the relative density of the population was such that the country could not feed its population.

The problem would be worse if the emigrants were to return. On the other hand, it appeared possible--and detailed studies had to be prepared on the subject--to reclaim vast areas, particularly in the eastern plateau area and in the Tihama (the coastal region). Irrigation works and modern agricultural technology would have to be considered. Before a position was finally adopted, much greater knowledge of all the demographic processes involved was necessary.

A further factor, which was not explicitly discussed, but may have been considered by the Government, was the numerical balance between the various religious groups of populations, and between numerous tribal groups within a volatile political situation. Whatever the actual distribution, it is probable that any attempt by the Government to modify rates of population growth would have been spatially differentiated, and would therefore, at least temporarily, have altered the balance between groups.

Policy with regard to size and growth

In 1938 the Imam had forbidden further emigration. It is not known if this was to ensure a sufficient agricultural labour force or to prevent the entry with returning migrants of foreign attitudes considered socially and politically unacceptable. Apparently in 1947 the policy remained in force.

In his study of development problems and policy options published in 1964, the then Director General of the Yemen Bank for Reconstruction and Development proposed among the priority development goals which he listed the application to development projects of the unemployed and underemployed labour force. It would be necessary to choose to a considerable extent labour-intensive types of production.

Morbidity and mortality

Information available to the Government

Little statistical information is available for the period. In 1947 it had been reported that the healthy climate "kept the death rate low". However, in 1952 it was noted in a general survey published in Cairo that although no statistics were available, levels of mortality, particularly of infant and child mortality, appeared very high. Health conditions were extremely poor, with widespread malnutrition and undernutrition. The khat habit had a harmful effect. In 1947 a single hospital in Sana'a had been reported, and only one dispensary, in Ta'is. In her report on a period of work in the country, published in 1955, a French doctor had noted poor health, high morbidity and mortality, and very limited health services.

In 1962 the United Nations Children's Fund (UNICEF) reported that malaria, tuberculosis, venereal diseases, bilharziasis and smallpox

were endemic. The World Health Organization (WHO) clinical surveys had indicated widespread preventable malnutrition. In 1964 UNICEF reported that although no nutritional survey had been made, it was clear that nutritional intake was low. A report by a United Nations specialist in 1962 stated that infant mortality rates were estimated to be between 250 and 500 per thousand, with the latter figure being considered most probable. At that time, a WHO adviser had reported that the principal health problems were tuberculosis, malaria, malnutrition, endemic smallpox, bilharzia, trachoma and gastro-intestinal conditions among children. Sanitary conditions were extremely poor, and malnutrition common, an important contributing factor being the high level of khat consumption. Ignorance of child care was considerable.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development reported that estimates of crude death rates had varied from 30 to 40 per thousand, and rates of infant mortality between 150-200, although a French doctor working in the country in the late 1940s had estimated rates of 400 for infant mortality, and 500 per thousand under the age of 10 years. On the basis of incomplete data and unspecified means of estimation, he reported that crude death rate had fallen from 16.4 per thousand in 1950 to 12.4 per thousand in 1958. Average life expectancy was considered at best not to be higher than that of Egypt--then 36 years for men and 41 for women. He noted that the introduction of penicillin and antibiotics had not taken place until after 1950, before which date treatment had been given only to the upper classes. Although some slight improvement had occurred, mortality levels were still strongly influenced by the degree of success of the annual harvest. Food consumption was thought to be lower than the necessary level, although not so low as in other countries in the region, as climatic conditions permitted polyculture generally sufficient to meet internal demand. However, in the period before 1964 climatic conditions had been poor, agricultural production had fallen, and individual incomes had declined. Consumption of khat was a major problem. Sanitary conditions were extremely poor. Health facilities had been described in 1951 and 1952, and by subsequent medical missions, as extremely poor. There was one doctor for 225,000 persons in 1964. Principal illnesses were tuberculosis, venereal diseases, trachoma, malaria, diseases associated with extremely unsanitary conditions and bilharziosis. Housing and clothing were completely inadequate.

Government perception of levels of morbidity and mortality

Under the administration of the Imamate, until the mid 1950s, it was possible that the Government considered levels of morbidity and mortality to be normal under prevailing conditions, and possibly even relatively better than in adjacent, less climatically favoured, areas. In 1959 the Director of the Permanent Anti-Narcotics Bureau of the League of Arab States reported to the Secretary-General of the United Nations that the Government did not consider khat to be a narcotic drug "according to preliminary chemical analyses and research."

After the revolution of 1962, the Director General of the Yemen Bank for Reconstruction and Development stated that morbidity and mortality were clearly unacceptably high, and this view was probably shared by the Government throughout the period.

Government policy with regard to morbidity and mortality

Until the mid 1950s only a few foreign health personnel had worked in the country, almost entirely in private practice for the benefit of the elite. There had been no modern governmental health programme, only traditional charitable works. In 1953 a WHO public health adviser had been appointed to assist the Government in building up a comprehensive service. At that time preventive measures were virtually unknown. A limited WHO project had begun in 1956. WHO had begun with assistance in establishing a health centre and training school, and provided an adviser in public health. In 1958 a Lebanese review had reported that well equipped hospitals existed in Sana'a, Taiz and Hodeida. In April 1962 the United Nations Children's Fund reported that a programme for the improvement of maternal and child health was being developed with WHO assistance. Staff were to be trained in two centres in Sana'a and Hodeida. These centres, and a hospital in Taiz, were to be the bases for a smallpox immunization campaign. In 1961 the first class of indigenous auxiliary nurses graduated, but in 1962 a United Nations specialist reported that there were no indigenous doctors, pharmacists or nurses.

After the 1962 revolution, in 1964, the Director General of the Yemen Bank for Reconstruction and Development stated that a national health programme would require substantial assistance by WHO, given the almost complete absence of Yemeni personnel. The training of national staff was considered to be of supreme importance, as the provision of necessary services was thought to be achieved most effectively by national rather than by foreign staff. In 1964 UNICEF reported that the Government had a broad plan for improving the general level of nutrition in areas around Sana'a by means of the improvement and extension of vegetable and fruit production and distribution. In April 1965 it reported that the assistance it had provided in 1962 for a maternal and child health training project had been confined to Sana'a and Hodeida because of unsettled political conditions elsewhere. As more settled conditions were achieved the Government had proposed what was described as a first concerted attempt to establish modern services and facilities adapted to local requirements and resources. No health service network existed, and all administration was centred in Sana'a. The Government was preparing a five-year health plan which called for decentralization, intensification and expansion. It was proposed to establish a small maternity hospital for training. Maternal and child health centres were to be increased in Sana'a, Taiz and Hodeida. The major obstacle was reported to be training. In a compilation of statistics published in 1967 the Ministry of Health reported 84 doctors, seven hospitals with a total of 2,485 beds (of which 2,200 in the three principal urban centres) and four health centres with 10 beds each.

Fertility

Information available to the Government

Little statistical information on levels of fertility was available prior to the 1962 revolution. In 1947 it was reported in a general survey published in New York that because of polygamy, birth rates were high. A study of the family in Arab countries published in the United States in 1954 provided no information on fertility levels.

In 1962 a United Nations specialist reported that the average total fertility was seven to eight, and that 10 was not an unusual number of children ever born. Family structure was characterized in the early 1960s by strong kinship ties within an extended family pattern. Family cohesion, within a strongly applied Islamic code of behaviour, remained strong. Social separation of the sexes was relatively less rigid than in some other Islamic societies, but age at marriage was early, not infrequently at 12 to 13 years. Polygamy appeared to have been restricted to upper-income rural families, and its incidence was declining in the early 1960s. Divorce rates were then thought to be high. Only small numbers of women had been educated, and women in public affairs were restricted to social welfare work.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development reported estimates of crude birth rates ranging from 45 to 60 per thousand population. However, he noted that it was impossible to confirm these levels. Rates showing substantial underreporting were noted, with levels of 23.9 for 1950-1954 and 36.7 for 1958, the latter being considered nearer to the real level. Relevant factors were the fact that there was no voluntary limitation of births by either contraception or abstinence. High levels of fertility were considered desirable and, conversely, sterility was considered a disgrace. Polygamy was widespread among the upper classes. The Moslem religion favoured high fertility. Abortion was condemned and absolutely prohibited by the law, religion and customs of the country. Marriages were very early, and levels of nuptiality very high. Children were desired not only for themselves, but also as future helpers in agricultural work, and eventual support in old age. This latter was achieved, for example, by emigrants who regularly remitted their earnings to their families.

Government perception of levels and trends of fertility

It is unlikely that the Imamate Government had perceived fertility levels to be anything but acceptable. After the 1962 revolution the Government perceived the need for improving the qualitative aspects of child-bearing and child-rearing, but the only statement known of a desire to limit levels of fertility as a means of achieving lower levels of natural increase was that of the Director General of the Yemen Bank for Reconstruction and Development in 1964, referring to a position held by a certain section of public opinion.

Policy with regard to fertility

A general review published in 1947 indicated that no policy designed to directly modify fertility behaviour had been adopted by the Imamate Government. Education programmes had been limited mainly to primary levels, with the exception of secondary education for the elite. During the Second World War a joint Egyptian and Iraqi mission had assisted in the establishment of a primary system; by 1941 there had been a reported 500 governmental schools. Literacy levels were high, principally because of the widespread existence of Koranic schools. An Halian review published in 1947 stated that the Government approved a limited secondary education programme "to secure the services of young men" for the administration. However, in 1955 it was reported by a foreign official that educational services were limited. Only two secondary schools for boys existed, to train the sons of the governing class. It appears that education for girls did not exist except for a limited amount provided at home for daughters of the elite.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development stated that it had been proposed by a certain section of public opinion that a policy of "birth control" should be adopted in view of their view that the country was overpopulated. However, he put forward the converse argument that the potential was great, and technological and organizational factors were the constraint upon expansion of production, implying rejection of the need for birth control. The virtual absence of a health service implied that it was considered in any case not feasible to adopt a family planning programme. However, it was reported by the United Nations Population Programme Officer for the region in 1971 that during the 1960s a small group of educated women had begun a limited programme of family welfare education in Sana'a and Taiz, but this had been disrupted by political events. However, no family planning activities were established during this decade.

In 1963 UNICEF reported that although six years of primary education was given in 1,000 primary schools, intermediate and secondary schools were very few, and there were almost no trained teachers. Most schools were near or in urban centres. In 1964 the Director General of the Yemen Bank for Reconstruction and Development stated that high priority should be given to education. It was pointed out that anti-illiteracy campaigns were more likely to succeed in Yemen than in some underdeveloped countries because of the widespread teaching of a certain ability in writing by the Koranic schools. No mention was made of the education of girls. In 1965 UNICEF reported that teacher-training was still not available for Yemeni girls. Three secondary, three intermediate and 39 of the reported 785 primary schools had been selected as demonstration units. Only three girls' schools existed; these were to serve as demonstration centres for local women, where instruction would be given in basic home economics including child care. The 1971 Statistical Yearbook reported that the number of girls enrolled in all schools increased from 1,780 in 1962/63 to 6,003 in 1969/70, compared to 72,021

boys in this year. However, there were no girls enrolled in secondary school. In 1965/66 there had been 3,556 girls and 71,344 boys enrolled in elementary schools, according to a compilation of available statistics published in 1969.

Immigration

Apart from earlier immigration to the coastal region and ports from north-eastern Africa, seasonal immigration from Saudi Arabia of shifting cultivators and semi-nomadic populations and migration of some elements of the urban elite population of Democratic Yemen after 1967, no modern immigration movement is known to have taken place, and no Government policy statement on the subject is known.

Emigration

Information available to the Government

Prior to 1938 significant but unknown numbers emigrated to adjacent countries, particularly to those under Italian administration. The effect of the Imamate Government's ban on further emigration in that year was reported in 1947 to have been still significant, although it is possible that war operations had interferred with that movement. After 1945 a growing movement to Aden had developed, and later in the 1950s, to Saudi Arabia. After 1948 the greater part of the Jewish community, estimated at about 60,000 to 70,000, emigrated.

Numerous Yemeni communities were reported in 1958 to exist in Ethiopia, Djibonti, Somalia, Democratic Yemen and the United Kingdom and France. In 1962 the United Nations specialist reported that considerable emigration was common. It was believed that 400,000 Yemenis were resident in Saudi Arabia. However, this total most probably included large numbers from the Hadramaut region of Democratic Yemen. Emigration was stated to be largely the result of insufficient land, the consequence of continued splitting of holdings, and of recent droughts. In many areas farms had been abandoned and villages partly depopulated as a result of emigration.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development reported that an estimated 1.0 million to 1.2 million Yemenis had emigrated but retained ties with the country. Emigration had always been a characteristic of the country. Young adult males were the principal emigrants, many returning in their old age. Movement was characterized both by long-term emigrants, mainly to urban areas in Arab countries, where important Yemeni merchant communities existed, and by short-term unskilled workers in adjacent countries, particularly in the ports of Democratic Yemen and Djibouti. In the years preceding 1962 a considerable return movement had occurred from

parts of Ethiopia, Djibouti, and Madagascar, and within the preceding 10 years the emigration movement had begun to slow down.

Government perception of levels and trends of emigration

In 1947 it was reported that a problem of the first magnitude had been created by the ban upon emigration, and that it would be absolutely necessary in the future to permit emigration.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development considered that, given existing pressure upon the land at low levels of technology, the return of substantial numbers of emigrants would cause a worsening of the nutritional and employment situations. A further positive aspect of emigration was the fact that substantial remittances were sent, supporting many families.

Policy with regard to emigration

In 1938 the Imamate Government had banned emigration, but it appears that at some date after 1947 this was relaxed, or at any rate became ineffective.

After the 1962 revolution consideration was given to the desirability of emigration. In 1964 the Director General of the Yemen Bank for Reconstruction and Development stated that it was then considered appropriate to adopt a policy of encouraging the return of emigrants, particularly of the several hundred thousand workers trained abroad, as these would constitute a working class necessary for development of Yemeni industry.

Spatial distribution

Information available to the Government

The country has an extremely long history of a functioning urban system within a society characterized by pre-modern technology and organization. In 1947 the population of Sana'a was reported as about 60,000, that of Hodeida from 35,000 to 40,000 and that of Ta'zz from 20,000 to 25,000. In 1958 it was reported that Ta'zz had already doubled its population, and that Sana'a was expanding rapidly beyond its walls.

In 1964 the Director General of the Yemen Bank for Reconstruction and Development emphasized the existence of a well-established urban system in which commerce and small-scale traditional industries were well developed. Sana'a contained from 120,000 to 150,000; Taiz about 50,000-60,000; al-Hudaydah, 40,000-50,000 inhabitants. The urban population was estimated at between 10 and 15 per cent of the total

population--about 540,000 to 810,000 persons. Only a small number of nomads were thought to exist, and semi-nomads represented only about 5 per cent of the total population. The average was over 50 per square kilometre in the central plateau area, but declined in other regions.

In 1962 a United Nations specialist reported that high densities within the agricultural area had been a major factor in causing emigration and in many areas farms had been abandoned and villages partly depopulated as a result of emigration.

Government perception of spatial distribution

No information on the Government perception of the acceptability of the pattern and trends in spatial distribution of population are known for this period. It may be presumed that in general terms, and in the context of the general level of development, it was considered acceptable. Severe dislocation of populations occurred during the civil war.

Policy with regard to spatial distribution

Although programmes in agriculture and transportation and communications were begun after the 1962 revolution, they were designed to improve levels of technology and organization from their traditional base, and were not intended to modify the pattern of population distribution. In any case, their implementation was severely constrained by the operations of the civil war.

II. THE PERIOD 1969-1976

The political and economic situation

Only in 1969 was it possible to resume normal administration, and a formal cease-fire was concluded in 1970, followed by the promulgation of a new constitution. However, a period of coalition Governments and generally tense conditions prevailed from 1970 until June 1974 when it was ended by the assumption of power by Colonel Hamdi. In its national report prepared for the United Nations Conference on Human Settlements early in 1975 the Government pointed out that development was only recently beginning to have an impact, and that a transition from the traditional form of society was still occurring. This situation reflected the backwardness which resulted from isolation under the Imamate, the period of civil war, and then that of droughts.

A considerable improvement in the economic situation occurred during the five years from 1970, in spite of droughts from 1966 onwards, which were severe in 1969 and 1970. This was the result of the ending of the civil war and a substantial inflow of Yemen emigrant remittances and foreign aid. Although assistance has been provided by many countries, during 1975 and 1976 very large loans and grants have been provided by Saudi Arabia, United Arab Emirates, Kuwait and Qatar.

Development planning

After 1969 and the end of the civil war, plan preparation was delayed further by the Government's involvement in emergency measures made necessary by an economic depression which followed the period of political instability, and by severe drought in certain regions. However, progress was made in the establishment of planning institutions. During the period from late 1971 to early 1972 the former technical office in the Ministry of Economy was transformed, with the help of specialists from the World Bank and the Kuwait Development Fund, into a central planning organization connected with the Prime Minister's office. Its establishment made possible the identification of planning priorities. In January 1972 it absorbed the statistical section in the technical office.

The Central Bank's annual report for 1972/73 reported that development planning was severely constrained by lack of a modern administration. The first scientifically prepared budget, for 1972/73, had been completed. In 1974 the Government published national accounts and supporting tables for 1972/73 on the basis of a new system, prepared with the assistance of ECWA. In November 1974 the United Nations Development Programme (UNDP) reported that it would assist the Ministry of

of Economy in the strengthening of its capacity to formulate a comprehensive development plan.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, the Government stated that one of the most important constraints upon development was the scarcity of modern institutions. The task of providing these was made difficult by the fact that the country was beginning its development with an underdeveloped administrative machinery, no tradition of a civil service and little concept of management principles. However, since 1970, considerable progress had been made in introducing basic elements of modern administration and economic management, establishing constitutional procedure and extending government control services throughout the country. With bilateral and multilateral assistance a number of ministries, including those of Finance, Economy, Agriculture and Education, had been reorganized. Increased economic development had in part resulted from these institutional improvements.

In November 1971 a joint World Bank/Kuwait Development Fund mission went to the country. Its main task was to draw up a co-ordinated development plan, decide economic priorities and organize investment resources. In October 1972 the Central Planning Agency published a list of the most important of the various development projects in the Yemen Arab Republic. As the preparation of a comprehensive development plan was then constrained by the scarcity of both information and experience of planning, a provisional list of projects which could be implemented with external assistance had been prepared. The list consisted largely of basic studies of agricultural development potential, natural resource surveys, population and agricultural censuses, provision of basic developmental infrastructure in the metropolitan and second order urban centres and establishment of efficient communications between them, provision for educational expansion, and a limited industrial development.

It was reported in 1973 that the Kuwait Development Fund and UNDP considered it necessary to assist in the preparation of a development plan, and in the provision of a modern central administration, as the lack of both was the principal constraint upon development. Subsequently, a preliminary three-year development programme for the period June 1973 to June 1976 was formulated. This was conceived essentially as a general orientation for the Government's activity rather than as a precise formulation of objectives and clearly defined targets. On the basis of the priorities indicated, the Government presented a request for United Nations Development Programme assistance in January 1974. In February 1974 the head of the Government's delegation at the first regional population conference reported that the first three-year development programme had begun implementation, and that it would be a preliminary to the formulation of a more comprehensive development plan, to be prepared with United Nations assistance.

In his speech at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative stated

that previous to the 1962 revolution the country had suffered from isolation, instability and severe backwardness. There had been no modern economic sector, and no modern governmental institutions. Construction of both had been severely constrained by the civil war. Since 1970 the country had enjoyed a period of stability and the Government had embarked upon a scientifically planned development programme. The first three-year economic and social development plan then being carried out aimed at a general improvement in the average standard of living.

In June 1975 the Government stated that "real development had started around 1971. The current three-year development programme for the period 1973/74-1975/76 placed major emphasis on agriculture, transport, health, education and water supply in order to supply the population with basic facilities. The programme involved an investment of 935 million Yemen rials, of which 31 per cent was for transportation and communication, 21 per cent for education, 15 per cent for agriculture and 10 per cent for public utilities. The remaining 23 per cent was allocated to health, energy and industry. In March 1976 it was reported that the Government was then working on the preparation of a four-year development plan to cover the period 1976/1977 to 1979/1980.

Information on the general demographic situation and trends

During this period a very substantial improvement was achieved in the effectiveness of the institutional system responsible for statistical data collection and analysis, and a number of important studies were undertaken. In January 1969 a first compendium of statistical data was published on the basis of work by a United Nations Statistical Adviser. This included only a limited reference to total population and to health statistics, and demographic information remained very united. Thus when in 1970 the United Nations Cairo Demographic Centre published a collection of papers on demographic measures and population growth in Arab countries, based upon research undertaken in 1968 and 1969, no information on the Yemen Arab Republic was included included in the tabulations of estimates for the Arab countries.

A statistical section was established as part of the technical office in 1970 with United Nations assistance. The organization of statistical units in other ministries, staff training and co-ordination of statistical activities were part of its functions. Its functions were constrained by lack of personnel. However, the earlier stablished Department of Statistics in the Ministry of Interior remained responsible for population activities. A census of Sana'a was taken in April 1970 as an experiment, and was directed by the Department of Statistics, Inspection and Control of the Ministry of Interior in consultation with the Statistical Section of the technical office. In December 1970 the first Statistical Yearbook was issued by the Planning Board. In March 1971 a UNESOB team visited the country to

explore the technical feasibility of undertaking a first national population census, as a result of which a request was submitted to the United Nations for assistance in the preparatory phases of a general population census. Resources for taking a national census were reported in June 1971 by the United Nations Fund for Population Activities to be very limited. During 1971 a national industrial survey was conducted and a sample survey made of textile workers in Sana'a. In September 1971 the Government published in Arabic and English its second Statistical Yearbook, prepared by the statistical office in the technical office of the Planning Board.

In November and December 1971 the Chief of the statistical office in the technical office represented the Government at an Expert Group Meeting on Traditional and New Techniques of Data Collection in Demographic Statistics, organized by UNESOB and held in Beirut. In a paper presented to the Meeting, it was stated that as no census had yet been conducted, the basis for the estimate of total population was completely unreliable. No vital statistics information was available. After 1962 attempts had been made to develop statistics, but these had been interrupted during the civil war. It was reported that the Government had established a Supreme Planning Board, within which was the nucleus of the central statistical system. Agricultural, industrial and social statistical programmes were being carried out, in addition to the training of staff for conducting a census. Statistical units in certain ministries and other government institutions had also been established. The Public Administration Institute was making an effort to add statistics to its training curriculum.

In 1972 the total of demographic information remained small. Thus the United Nations Cairo Demographic Centre published a collection of papers on population and human resource growth in Arab countries, based on research performed during 1970 and 1971. No papers were included with respect to Yemen and it was not included in the three comparative studies for Arab countries. In January 1972 the statistical section of the technical office was absorbed into the Central Planning Organization as the Department of Statistics. In June-September 1972 a sample socio-demographic survey was conducted jointly by UNESOB and the Department of Statistics of the Central Planning Organization in Sana'a, the metropolitan centre. This was considered a pilot survey for a later census, for which assistance from the United Nations was requested. In April 1972 a third Statistical Yearbook was published by the Department of Statistics of the Central Planning Organization. In December 1972 the Government was represented at an Expert Group Meeting on Mortality held in Beirut under the auspices of UNESOB and the Eastern Mediterranean Regional Office of WHO. A paper was presented. It stated that the Government was greatly interested in an improvement in demographic information, considered essential for the preparation of the development plan. It had been decided to take the first comprehensive census during 1974 and 1975 with the assistance of the United Nations.

During 1973 work began on preparations for the 1975 census. In July 1973 UNESOB reported that processing of the socio-demographic

survey of Sana'a had begun. The survey had been jointly implemented by UNESOB and the Department of Statistics of the Central Planning Organization. It was considered an important pilot exercise for the first population and housing census to be taken in 1975 and 1976. The Government had requested UNESOB to undertake similar socio-demographic surveys in Taiz and Hodeida in order to obtain information on mortality, fertility and internal migration. The Government was also interested in the creation of a demographic research centre. The results were published later in the year. In December 1973 it was reported by a national newspaper that all citizens would bear personal identity cards. This would assist in ensuring proper access to social services, in the limitation of work permits issued to foreigners, as well as the provision of demographic information to assist in planning national development.

In his speech delivered at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative stated that statistical data, particularly that concerning the demographic situation, was lacking. As no population census had been held, current official sources from which population data had been estimated consisted of information on the numbers of religious taxpayers. This source was considered to lack precision and universality. Consequently, the census to be taken under United Nations auspices early in 1975 was described as an important project as it would provide data required for planning.

A substantial information collection project was included in the UNDP country programme submitted to its Governing Council in January 1974. In February 1974 it was stressed at the First Regional Population Conference in Beirut that the undertaking of a census was very much needed, as neither census nor vital statistics information was then available. At the same meeting, the head of the Yemen delegation emphasized the seriousness of the lack of information and the intention of the Government to give priority to the improvement of the situation. The census would be held in December 1974 and January 1975. He stated that great importance was attached to the census since it would have a great effect on their ability to draw up proper development plans. In June 1974 it was announced by UNESOB that enumeration of housing and population would begin in January 1975, and that publication of preliminary results was planned for April 1975 and that of population characteristics for October 1976. In December 1974, the newly appointed director of the Department of Statistics was able to present a comprehensive outline of urbanization and internal migration, together with estimates of most components of demographic behaviour, to the Expert Group Meeting on Demographic Aspects of Urbanization and Internal Migration held in Beirut.

In a study of technical problems encountered in taking the February 1975 census, presented by a representative of the Central Planning Organization at a regional seminar on techniques of collecting, evaluating and estimating demographic parameters held at Amman in January 1976, it was stated that an alternative date, that of February 1976, had been

rejected in view of the Government's urgent need for information for the formulation of the development plan due to begin in 1976/77.

In February 1975 the census was taken and the Minister of Planning announced preliminary results in May 1975. Detailed provisional results were published in August 1976. Because of concentration upon the census operations, a Statistical Yearbook for both 1974 and 1975 was published in 1975, and although it had been hoped to include the preliminary results of the census, this did not prove possible, and most demographic information was based upon the 1972 sample survey of Sana'a. Considerable progress in improvement of statistical services was reported.

In its national report prepared for the United Nations Conference on Human Settlements prepared early in 1975 and transmitted in June of that year, the Government stated that the scarcity of basic information was still one of a number of serious constraints upon development.

In its reply to the United Nations Third Population Inquiry on population policies in the context of development, transmitted in April 1976, the Government stated that it had assigned priority to research into population projections and models; interrelationships between economic and social and demographic factors; relationships between population and food, education and labour; morbidity and mortality; internal migration and regional distribution; international migration; and human rights and population matters. Of these, because it lacked the means to carry out the research needed, it stated that for the time being the topics of food and population, morbidity and mortality, and internal migration and regional development were being neglected. The principal reasons for this inability were stated to be financial and staff shortages. Training facilities available in the country were stated to be not satisfactory in respect of all topics and for all levels of staff. The need for training in census and vital statistics collection and analysis was stated to be partially compensated by opportunities for training abroad, but this was not the case for any other field.

The Government stated that the Central Planning Organization was the institution responsible for the collection and analysis of demographic information. Throughout its reply, the Government indicated that the insufficiency of information was the principal reason for the non-formulation of its perception of the acceptability of demographic processes, and the desirability of intervention in them, or in economic and social processes, in order to achieve the objectives of development.

General policy with regard to the demographic situation and trends

The severe constraints upon development planning, and particularly the scarcity of demographic information, precluded for some time the formulation of a comprehensive population policy and involvement in

regional population activities. Consequently the Government did not reply to the Second United Nations Inquiry on Population Growth and Development, transmitted to Governments in October 1972, and did not provide a summary country statement as part of the documentation for the United Nations World Population Conference in August 1974.

In 1969 a population unit was established at UNESOB and this subsequently began a programme of data consolidation and evaluation, technical assistance and research which filled a severe need in many of the countries in the region, and with regard to Yemen strengthened the Government's capacity in the field of population. The Government was represented at the First Regional Population Conference held by the United Nations Economic Commission for Western Asia (ECWA) in February 1974. The advisor to the Central Planning Organization acted as head of the delegation, assisted by the head of the Population Census Department in the Central Planning Organization and by two observers from the Ministry of Health. The Government was also represented at the regional consultation preparatory to the World Population Conference held in Damascus, Syrian Arab Republic, in May 1974, by the Director of the Department of Statistics and also at the United Nations World Population Conference itself, held at Bucharest, Romania, from 19 to 30 August 1974. However, the Government did not make a comprehensive statement on population policy at either of these meetings.

In July 1974 it was reported by UNESOB that government participants would attend the three-month workshop on demographic studies and population policy to be held in March 1975 at the Arab Institute for Economic and Social Planning in Kuwait. The programme was to include study of the processing and analysis of the 1975 population census of Kuwait.

That morbidity and mortality was the demographic factor of greatest concern to the Government was indicated by the fact that the head of its delegation at the United Nations World Population Conference held at Bucharest in August 1974 was the Minister of Health. The Minister delivered a statement which included the Government's views and policies with regard to all aspects of the relationship between the demographic situation and development.

Although no other comprehensive population policy statement has been made, the Government has formulated sectoral policies relevant to those areas of population behaviour considered of the highest priority: morbidity and mortality, spatial distribution of population, and international migration and has adopted a policy of non-intervention during the immediate future with regard to fertility and natural increase. These positions were set out also in the current development programme. and in the paper presented by the Director of Statistics at an Expert Group Meeting on Demographic Aspects of Urbanization and Internal Migration held in Beirut in December 1974.

In June 1975 the Government transmitted the interim version of its national report prepared for the United Nations Conference on Human

Settlements to be held at Vancouver, Canada, in May and June 1976. This national report included substantial comment on the Government perception of problems associated with population, and on its policies. In April 1976 the Government transmitted its reply, prepared by the Central Planning Organization in the Prime Minister's Office, to the Third United Nations Population Inquiry on Population Policies in the Context of Development. In its reply it stated that the Central Planning Organization was responsible for the assessment of demographic factors and for the formulation of population policy.

A comprehensive summary of the census results, with comments on their implications for achievement of development objectives, was published by the Government in its first socio-economic survey, for the period 1970-1974, published in 1976.

Size and growth of the population

Information available to the Government

During this period information available, although still inadequate, improved substantially. Estimates were derived by trained personnel from sample surveys instead of from traditional administrative means, and in May 1976 the preliminary results of the February 1976 census were announced.

In its Statistical Yearbook for 1970/71, published in December 1970, the Government reported that its estimated total population in mid 1970 was 5.728 million. The estimates of total population (de jure) were based upon religious-tax collection records which showed an increase from 5.134 million in 1965 to 5.854 million in 1971, an average annual rate of increase of 2.21 per cent. However, in a paper presented to an Expert Group Meeting on Traditional and New Techniques of Data Collection in Demographic Statistics held in Beirut in 1971, the Government emphasized that estimates of population for 1965 and following years were based on completely unreliable records maintained in connexion with the collection of the zakah tax prior to 1962, after which payment of this tax ceased to be a government responsibility. They were said not to reflect even an approximate picture of the actual population. No information was available from the taxation data on sex and age. No rate of increase could be established in the absence of vital statistics. On the basis of what was described as a pilot population census (conducted by the Statistics Section of the Ministry of Interior), the Statistical Yearbook in 1971 and 1972 reported that 46.4 per cent of the males and 52.5 per cent of females were aged 15 and under.

In 1974 the Government used an estimated total population of only 4.860 million for 1972 in the preparation of its national accounts for 1972-1973. The divergence between this total and other higher figures published in government statistical series, may have been the large

difference between de facto and de jure populations resulting from substantial emigration. In August 1973 the United Nations Development Programme used an estimate of 6 million for 1972, which was for the de jure population.

In his speech delivered at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative repeated earlier reports that the official source of information on population size--the number of religious-tax payers--had been used to estimate a total population in 1952 of 4 million, of 5.134 million in 1965 and 6.06 million in 1972. The average annual rate of population growth was about 2.6 per cent. On the basis of sample surveys and studies already made in different parts of the country, it was thought that the population of economically active age (15 to 60 years) comprised about 50 per cent of the population, those 60 years and over only 3 per cent, and the remainder were under 15 years. As the number of emigrants was estimated to be about 1.5 million, the de facto population was about 4.5 million at this time.

In a study of urbanization and internal migration, published in December 1974 the Government estimated the total de jure population not to exceed 6 million, with an average annual rate of growth of 2.5 per cent. The socio-demographic survey conducted in Sana'a in 1972 had suggested that 47 per cent of the population was aged under 15 years, and only 3 per cent were aged 60 years and over. The labour force constituted only 29 per cent of the total population.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, the Government stated that no accurate data on the population were then available, the announcement of the preliminary results of the census taken in February 1975 not being available at the time of preparation of the report. In 1972 the total de jure population had been estimated at 6 million, with an annual rate of growth of about 2-3 per cent. The estimated de jure population in 1973/74 was reported to be 6.217 million, with a rate of natural increase of about 2 per cent per year.

In April 1978 the Population Division of ECWA reported that the de facto population in 1970 had been 4,340 million, and that in 1975, 4,526 million. This latter total, derived from the provisional results of the 1975 census published in August 1976, included the population covered by the census of that year, to which an additional estimated 0.712 million not covered by the census should be added (of which 300,000 in areas not enumerated, the remainder the estimated under-enumeration). As there were 1.234 million Yemenis abroad, the total de jure population in that year was 6.472 million. In 1975 the census indicated a total of 46.8 per cent under 15 years, and 3.6 per cent aged 60 years and over. On the basis of an unpublished study completed in March 1977 it was reported that the rate of natural increase was 2.39 per cent, and the rate of population growth, because of the high levels of emigration, was 1.8 per cent.

The economically active population in 1975 totalled 1.136 million, 25.1 per cent of the total population. Seventy-three and eight tenths per cent of males aged 10 years and over were classified as active economically, and 8.6 per cent of females within the same age group.

Government perception of size and growth

During this period the Government perception of the acceptability of the size and growth of its population was influenced by the following factors: the short-term and long-term potential of the rural economy to support the increasing demand for food; the short-term opportunities for continued large-scale emigration; and the rapidity with which technological and organizational modernization could be achieved--itself in part dependent upon the rate of inflow of financial and technical assistance.

Although clearly limited by climatic factors, an initial appraisal of the potential for expansion of agricultural land suggested that a substantial potential exists. Thus in its 1971 Statistical Yearbook the Government reported that the Ministry of Agriculture had estimated in 1969 that the cultivable area constituted 26 per cent of the total area, and forests and shrubs 2 per cent. Also in 1971, in a paper presented to a regional meeting on demographic statistics, the Government reported that the area of arable land, approximately 19,000 square kilometres, constituted nearly 10 per cent of the total. However, during the past decade climatic conditions have been unduly severe. In 1973 the Central Bank reported that drought conditions had begun in 1966 and had continued to that year, with consequent reduction in production. UNDP reported in 1974 that the Government considered that prospects for medium- and long-term development of primary production were "far from discouraging" because of the ability and tenacity of the farmers, the existence of tracts of fertile land whose productivity could, with appropriate inputs, be rapidly improved, the possibility of increasing livestock production and the fisheries resources of the Red Sea.

In his speech delivered at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative, the Minister of Health, stated that the average annual rate of population growth--2.6 per cent--was expected to increase as a result of an improvement in nutrition and the expansion of health services. On the basis of existing estimates of total population size, it was considered that the country was not then facing a problem of overpopulation. Population growth was not currently considered to be a serious problem. It was implied that the absence of 1.5 million emigrants, although in itself not considered to be acceptable because of the resultant limitation in the size of the labour force required for development, was not perceived to be a factor responsible for relief of what might otherwise be an excessive population. However, it was noted that "the emigration of the Yemeni people constitutes a natural...demographic safety-valve". This operated by means of the limitation of fertility, which was considered to be the result of the absence of emigrants, and their return only for a few months every three or four years.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government described its perception of the problems facing development efforts and prospects for the future. It noted that the country had experienced a long period of isolation up to 1962, thereafter nine years of civil war and several consecutive years of severe droughts. The economy was very underdeveloped, with an estimated GNP per capita of between US$100 and US$105. The country had been designated by the United Nations as one of the "least developed" among developing countries.

The basis of both society and economy was the rural sector, which contributed about 70-80 per cent of GDP, 90 per cent of export earnings, and employed 80-90 per cent of the active population. In spite of its predominance, food accounted for half of all imports. Economic development and improvement of the basic living standards of the population depended clearly upon expansion of the rural sector. Major constraints upon improvement in agricultural productivity were erratic rainfall coupled with absence of basic knowledge of water resources, deficiencies in basic institutions and skilled manpower, the low level of technology and the lack of social overhead infrastructure, and other complex socio-economic and political institutions inherent in a centuries old, basically tribal society. Necessary institution-building was beset with numerous problems. Land shortage was causing a considerable movement of the active population out of agriculture. The country was described as not "endowed with generous resources: especially the scarce supply of water makes life for the Yemeni, who is by tradition and through stubborn endurance a tiller of the soil, a daily hardship scarcely encountered (elsewhere) in the world".

Nevertheless, the Government noted improvement in economic position during the preceding five years, as a result of the ending of the civil war, recently more favourable rainfall, a substantial inflow of capital from Yemenis outside the country, and substantial foreign assistance. A considerable growth of entrepreneurial confidence in the economy had resulted. The Government had achieved substantial success in building up institutions and in investment in key components of a wide range of sectors. As traditional skills and organizations had not been destroyed, they were capable of a simultaneous absorption of new technology and maintaining a substantial labour force. In general the Government considered that

> "with the introduction of the new and progressive system of Government and of a new way of life, modern technology has come within reach of the rural population and with the help of the wealthier members of the tribe, is being used to advantage in relieving some of the hardship and offering new opportunities, to add a little to individual cash earnings. A breakthrough from traditional and status society towards a new way of life is manifest in most parts of the country."

It may be assumed, therefore, that the Government perceives technological and organizational development to be the principal means to resolve current problems, and that in a still largely labour-intensive society, and one still organized to make optimal use of labour at traditional levels of skill, the benefits of continued moderate rates of population growth are considerably greater than costs and do not in themselves create a problem.

A note on the impact of emigration upon achievement of development objectives published in March 1976 stated that implementation of the three-year development programme for the period 1973-1976 had been seriously handicapped by the shortage of skilled labour, and that it was anticipated that the succeeding four-year plan would be similarly affected. The immediate problem appeared to be a shortage of skilled labour for the modern sector, rather than of a general shortage of labour. Nevertheless, it was noted that the country faced a serious and long-term problem in that it was a country which had a very low economic base, whose main asset was a relatively large supply of labour, and yet which was adjacent to one of the richest group of countries in the world, characterized by enormous financial resources but by a chronic shortage of labour. The fact that the country had to export its labour force in order to obtain needed financial resources for development seriously jeopardized its own development programme.

In its reply to the United Nations Third Population Inquiry, transmitted in April 1976, the Government stated that it considered current rates of population growth simultaneously contributed to and constrained the achievement of various development objectives. This dual impact was perceived principally with respect to the provision of an adequate labour force, the aspect for which population growth had the closest implications. However, because of the still insufficient level of information available, the Government stated that it had no view as to whether the current rate of growth was satisfactory or not.

In its first socio-economic report, published in 1976 for the period 1970-1974, the Government noted that the country faced rates of natural increase exceeding 3.0 per cent in the near future. This had been the experience of other countries in the region during the previous decade. Accordingly it was essential to prepare plans which would take into account future population growth, which might have serious repercussions in various areas of development. These were intensified as the fact that per capita income would not grow at the same rate as natural increase; consequently an increasing proportion of the national income would be absorbed by the population increment. Increased costs of providing social services, increased need to provide employment, and increased demand for foodstuffs would also result. The latter was particularly important given the present need to import food. However, it was not stated that an attempt to reduce rates of natural increase was considered desirable.

Within the last two years of the period several aspects of the economic situation became much more favourable. In December 1975 it

was reported that the country had achieved self-sufficiency in food grains, with a production 3 per cent higher than that in 1974. The country benefited from substantial assistance from other Arab countries. For example, in April 1975 it was reported that the United Arab Emirates would finance a $100 million series of projects prepared on the basis of British studies. Aid from the Abu Dhabi Fund, from Qatar and Kuwait, and in August 1975 aid and loans totalling $273 million for Saudi Arabia had also been arranged. These improvements may be expected to have supported a view that intervention to modify rates of natural increase was not urgent. Because of the inadequacy of information concerning population growth, it would be difficult for the Government to formulate a clear perception of the acceptability of current levels and trends in population growth and of the desirability of intervention to modify trends. Emigration provided the principal solution to problems associated with population growth. The development programme being implemented during the final years of the period concentrated its attention on the improvement in utilization of physical and human resources. Although evaluation of physical resources was at an early stage, the awareness of historical conditions of prosperity, and modern preliminary surveys, gave grounds for moderate optimism.

The Government was concerned with the preliminary phase of modernization of societal structure. It was very difficult to anticipate what would be the most appropriate size and level of growth of the population, and difficult to anticipate the speed with which technological and organizational change would have a significant impact upon population behaviour. Any improvement in the extremely low health status of the population would accelerate growth. At the end of the period, it may be assumed, the Government perceived the level of increase in the economically active population as "excessive" and that intervention to limit growth was still desirable. This intervention consisted of permitting and encouraging emigration to adjacent countries, principally to Saudi Arabia. This solution was likely to remain significant until societal development would begin to have demographic consequences. In any case the demand for emigrant workers in adjacent countries was likely to be maintained and even to increase during the next decade.

Policy with regard to size and growth

As neither the size of total population nor the rate of population growth were then considered to be problems, the Government's representative at the United Nations World Population Conference held at Bucharest in August 1974 identified no measures designed to adjust the rate of natural increase. However, having noted that emigration had the effect of limiting fertility levels, the representative, the Minister of Health, stated that "in spite of the fact that population growth is not a serious problem at the present time, the authorities have started the necessary preparations regarding family planning, as a safeguard against population growth in the future; also as a necessity for a future population policy that will aim at improving the status of the family". The Minister also indicated that the Government was attempting to limit emigration

and secure the return of emigrants. The Government had clearly distinguished between short-term and long-term desired levels of population growth and size.

The Government gave no indication of its desire to intervene to modify rates of population growth in the national report which it prepared for the United Nations Conference on Human Settlements and transmitted in June 1975. Recognizing as it did the presumed high levels of both fertility and mortality, and announcing a substantial programme designed to reduce morbidity and mortality, it may be presumed that the Government was aware of the probable increase in natural increase rates which would result from its current strategy, and accepted the probability of an upward trend.

During 1975 ILO and UNDP assisted the Government in a comprehensive assessment of the labour force situation and its implications for training and education policies. This reflected the Government's view that the immediate problem was the qualitative rather than the quantitative aspects of the labour force.

In its reply to the United Nations Third Population Inquiry transmitted in April 1976 the Government stated that because of insufficient information it did not have a view as to whether adjustment of either economic and social factors, demographic factors, or both was the most appropriate response to perceived problems related to population growth. For this reason it did not at that time have a formulated policy of intervention to adjust either economic and social or demographic processes.

Morbidity and mortality

Information available to the Government

In January 1972 the International Planned Parenthood Federation (IPPF) reported that UNICEF had estimated infant mortality in some regions to be 400 per thousand. At an Expert Group Meeting on Mortality held in December 1972 the Government stated that as no population census had been taken, no information on levels of mortality could be provided. Untabulated data from the sample survey of Sana'a taken in June-September 1972 had suggested high levels of mortality, which were, however, lower than those thought to have prevailed before 1962, as a result of the considerable increase in provision of health services. This improvement, although stated to be relative, was achieved in urban centres and adjacent areas. However, the situation in less accessible areas was thought still to be very poor. In March 1974 UNDP reported that the water supply for Sana'a was totally inadequate and completely polluted. In December 1974 it was reported by the Government's representative at a regional meeting on demographic statistics that the Government estimated crude death rates to be 25-30 per thousand. No estimate was provided for infant mortality.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, the Government stated that mortality was presumed to be relatively high: life expectancy was estimated to be about 30-40 years, and infant mortality rates about 500 per thousand live births. Widespread malnutrition existed. Malaria, eye diseases, gastro-intestinal infections, tuberculosis, smallpox and nutritional diseases were widespread. Inadequacies in sanitation and public health facilities rendered the country subject to serious epidemics. Severe famine had accompanied the droughts of the early 1970s.

In April 1978 the Population Division of ECWA reported that, on the basis of the provisional results of the 1975 census, and an unpublished study completed in March 1977, crude death rates in 1975 was 25.0 per thousand population, the infant mortality rate 210 per thousand live births, average life expectancy at birth for both sexes 38.3 years.

Government perception of levels of morbidity and mortality

In its paper presented to the Expert Group Meeting on Mortality held in December 1972 in Beirut, the Government stated that, with the establishment of hospitals and clinics in the principal urban centres and clinics in some rural areas, a steady improvement in nutrition and health had occurred after the revolution of 1962. However, the civil war period had interrupted progress, particularly in areas away from the principal urban centres.

In 1974 UNDP noted that the Government was seriously concerned about the poor state of health. Health services remain inaccessible to the majority of the rural population. Preventive services had been neglected. Although communications were being improved, considerable populations remain inaccessible. It appeared that unless very substantial acceleration in provision of social services becomes possible, the decline in mortality would be slower than desired.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government stated that health conditions, particularly among the rural population were highly unsatisfactory and that comprehensive programmes of improvement in health, nutrition, sanitation, water and education were essential. In its reply to the United Nations Third Population Inquiry, transmitted in April 1976, the Government indicated that the formulation of its perception of levels of mortality was severely constrained by lack of information.

Policy with regard to morbidity and mortality

In its Statistical Yearbook for 1971 the Government reported that there were 31 hospitals with 3,874 beds, of which 3,185 were in the three principal urban centres. There were 221 doctors, of which 115 were

Yemeni. In his address at the First Regional Population Conference held in Beirut in February 1974, the head of the delegation stated that the Government, in its first three-year development programme, had given the highest priority possible to provision of health services. In January 1972 UNDP approved a two-year project, subsequently extended, to establish in Sana'a an institute of health manpower and to develop a training programme for paramedical and auxiliary health personnel. Other assistance has been given in hospital administration and nursing services, and to improvement of the administration of rural water supply development.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government stated that public concern to obtain improved health services was growing and spreading into rural areas. There were then 33 hospitals, the majority in urban areas, with a total of 4,119 beds, or 1 per 1,500 persons. There were also 25 dispensaries, mostly in rural areas. The objectives of its health policy during the three-year plan period included the construction of 10 hospitals, with 1,460 beds, mostly in areas least well provided with facilities; construction of 25 health centres, each with 10 beds, mostly in rural areas; continuation of smallpox and bilharzia campaigns and inauguration of an anti-tuberculosis campaign and a campaign against eye disease; improvement of maternal and child care services, and introduction of a family planning programme; construction of a health manpower institute; provision of mobile clinics, and improvement of all services. In support of this programme, improvement in provision of sanitation and water in both urban and rural areas, and the general improvement of agriculture and nutrition, were planned.

In February 1976 it was reported that the Minister of Health had appealed to other Arab countries for $750 million to overcome its health problems. During 1975 and 1976 substantial financial and technical assistance for these programmes was received, mostly from Arab countries in the region.

Fertility

Information available to the Government

Information on levels of fertility was inadequate throughout the period. Thus, in 1971 the United Nations Cairo Demographic Centre published a collection of studies of fertility in Arab countries, based on research conducted during 1969 and 1970. No papers were included with respect to the country, and it was not included in the three comparative studies for Arab countries.

The latest government estimates of fertility, based on recent socio-demographic surveys conducted in Sana'a in 1972, were of crude birth rates of 50 to 55 per thousand. At a regional meeting on demographic statistics in December 1974 the Government stated that high

fertility was a response to the very high levels of morbidity and mortality. In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government gave no estimates of the levels of fertility, but noted that rates were "presumed to be relatively high". In December 1973 an Expert Group Meeting on Fertility was held in Beirut, and was attended by government officials. They reported that no information on fertility was available.

The Government's representative at the United Nations World Population Conference held at Bucharest in August 1974 stated that fertility was currently limited by the high levels of emigration. As emigrants were entirely male, and mostly young, and as they returned for a few months only every three to four years, the situation was considered to "indirectly help in minimizing the size of the family".

In April 1978 the Population Division of ECWA reported that, on the basis of the provisional results of the 1975 census, and an unpublished study completed in March 1977, the crude birth rate in 1975 had been 48.9 per thousand of population, the total fertility rate 6.8 and the gross reproduction rate 3.3. On the basis of information presumably derived from the provisional census results, it was reported that the mean age at marriage had been 22.4 years for men and 17.7 for women in 1975. The celibacy rate at age 50 in the same year had been 1.5 per cent for men and 2.0 for women.

An American review published in 1977, for which research had been completed in November 1976, noted that most women breast-fed their babies up to the end of their second year. In general child care and nutrition were very poor. Because of high mortality among children, couples attempted to have seven to eight children in order to ensure the survival of two, and one survey had indicated that nine was the ideal family size. High rates of stillbirth and miscarriage resulted in part from primitive delivery conditions and the low age of women at the time of their first pregnancy. Contraception was understood and practiced only by a very few women. The status of women had been scarcely changed from their traditional condition. Marriages generally occurred between the age of 12 and 14 years. There were very strong social attitudes in favour of bearing a male child.

Government perception of levels and trends of fertility

In his speech at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative, the Minister of Health, made no specific statement on the acceptability of fertility levels, but in noting that they were kept relatively low as a result of the substantial emigration over long periods of young men, he implied that the situation was considered acceptable.

In its reply to the United Nations Third Population Inquiry, transmitted in April 1976, the Government stated that, because of insufficient information, it had not adopted a specific perception of levels of fertility, or of their effect on family welfare or on rates of population

growth, nor was it able to state to what extent the present level of fertility was influenced by the age at marriage of women. Nevertheless, it considered that the contemporary age at marriage contributed negatively to family well-being because it was too early.

In his address to the First Regional Population Conference held in Beirut in February 1974 the head of the delegation made no reference to fertility. Nor did the paper presented at the Expert Group Meeting on Demographic Aspects of Urbanization and Internal Migration, held in Beirut in December 1974.

Policy with regard to fertility

During the period the Government gradually explored and finally adopted a policy of supporting a qualitative improvement in fertility by means of inclusion of family planning in maternal and child health services. No official or unofficial representative attended the conference on induced abortion held in Beirut in February 1971 and organized by the Middle East and North Africa region of IPPF. In January 1972 IPPF reported that in 1971 two Yemeni doctors had participated in a training course in family planning held in the American University of Beirut and arranged in co-operation with UNICEF and WHO. Physicians provided family planning advice privately. There was no family planning association and the Government had not announced its policy with regard to family planning. The Federation reported in July 1973 that some interest in family planning for health reasons had been shown by the Ministry of Health, which had established contacts with WHO and IPPF. Observers from the country had attended the IPPF Regional Council meeting for the Middle East and North Africa in 1973. In association with this meeting, in May 1973 a Seminar on Social Aspects of Family Planning was held in Nicosia and was attended by non-governmental representatives.

In August 1974 the Government's representative at the United Nations World Population Conference held at Bucharest stated that the Government had "started necessary preparations regarding family planning, as a safe-guard against population growth in the future; also as a necessity for a future population policy that will aim at improving the status of the family". IPPF reported in October 1974 that an allocation for 1975 had been made to provide for the establishment of a family planning association in Yemen.

In its national report prepared for the United Nations Conference on Human Settlements, transmitted in June 1975, the Government stated that, as part of its health programme within the three-year development plan for the period 1973-1975 it was intended to introduce a family planning programme within a programme of improvement of the maternal and child care services. However, in its reply to the United Nations Third Population Inquiry, transmitted in April 1976, the Government stated that it had no formulated policy with respect to fertility, either in relation to family well-being or to its contributions to population growth. It appeared that the Government perceived family

planning as a component of maternal and child health, and possibly of family welfare. Given the very high levels of perinatal, infant and child mortality and the limited amount of change in social structure, it is most probable that the Government perceived as premature any discussion or policy formulation with regard to fertility modification unrelated to family health and welfare. Traditional attitudes to fertility remained littled changed. Thus, in a paper on preparations for the first national population census, delivered at the First Regional Population Conference in February 1974, it was stated that a special publicity campaign had been necessary to persuade the population of the propriety of answering questions concerning the number of children ever born, an indication that traditional attitudes with regard to fertility still prevailed very strongly.

In its first socio-economic report, published in 1976 for the period 1970-1974, the Government stated that family planning was viewed, from the standpoint of its wide social implications, as a means of improving family welfare and individual health, and of assisting parents in planning the timing of the births of their children and the achievement of desired size of completed family. Health and nutrition services were included. The Government noted that in spite of the recency of its beginning these services, it had benefited from the experience of other countries. Services were provided by the Ministry of Health within maternal and child welfare centres located in urban areas. A new centre for maternal and child welfare and family planning was to be established with United Nations assistance in Sana'a, and would serve as a model to be diffused subsequently to other cities. It was expected that a new family planning association would begin its activities in the near future. The Government intended to support the extension of these services, and to co-ordinate them particularly with services in health and nutrition.

However, certain of the Government's non-demographic policies were likely to have, at least in the long term, a significant impact upon fertility behaviour. During this period considerable progress has been made in provision of education, particularly for girls. In August 1973 it was reported by UNDP that implementation of its educational policy was only then beginning, and that the shortage of trained workers was a major constraint. The illiteracy rate was estimated at 90 per cent, and only 12 per cent of the 6-11 age group were enrolled in primary education. However, in 1973 the Central Bank reported that education continued to expand: in 1972/73 there were 17,630 girls out of a total of 187,607 pupils, an increase from 12,339 in the previous school year.

Pupils in secondary schools numbered 7,306, of which only 96 were girls. The address of the head of the delegation at the First Regional Population Conference stated that considerable investment had been allocated to provision of social services, particularly health and education. In March 1974 a large-scale project of United Nations assistance in the development of education was announced.

In April 1978 the Population Division of ECWA reported that in 1975 the illiteracy rate of the population aged 15 years and over was 75.5 per cent for males and 98.4 per cent for females. Proportions for the population aged 15 to 24 were 70.6 and 96.6 per cent, respectively. Of the population aged 25 years and over, 99 per cent were estimated to have less than first level of education. On the basis of UNESCO data for 1970 the gross enrolment ratio in that year had been 9.9 per cent for the first level, 0.8 per cent for the second and 0.01 per cent for the third. In 1975 it had been 24.3 per cent for the first level, 2.8 per cent for the second and 0.3 per cent for the third, on the basis of unpublished data prepared by UNESCO.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government stated that as part of its three-year development programme for the period 1973/74-1975/76 the education programme would include the establishment of a planning department, and a very substantial programme of construction and training. No separate mention of education for women was made.

In this report the Government noted that the literacy rate was currently estimated at about 5 to 10 per cent, and that modern education did not begin until after the 1962 revolution. Since the revolution enormous progress had been made, although much remained to be done. It was reported that a breakthrough from traditional society and status towards a new way of life was manifest in most parts of the country.

Immigration

It is probable that immigration (as distinct from repatriation of emigrants) during the period was limited to movement from Democratic Yemen which was numerically small, but economically significant. The Government stated in its reply to the Third United Nations Population Inquiry, transmitted in April 1976, that because of insufficient information it had not adopted any perception concerning immigration. No policy was noted. It may be presumed that there were no grounds for the Government to favour any significant immigration in current or foreseeable circumstances.

Emigration

Information available to the Government

At the World Population Conference in August 1974 the Government reported that about 1.5 million emigrants were abroad, mostly young and all of them men. In December 1974 an official estimate indicated that there were about 1 million Yemenis resident outside the country, temporarily in adjacent countries and permanently in more distant countries, such as those of Europe and North America. In adjacent areas, Saudi Arabia, the Gulf States, and Somalia had Yemeni communities.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975 the Government stated that pressure of population on land had resulted in a high rate of emigration to other Arab countries, estimated at "well over a million people".

In August 1975 it was reported that the Office of the United Nations High Commissioner for Refugees had agreed to set up centres for 100,000 refugees from Democratic Yemen and neighbouring African states. In January 1976 it was reported that very large numbers of Yemenis had left Ethiopia since 1974.

In April 1978 the Population Division of ECWA reported that on the basis of the provisional results of the 1975 census the number of Yemenis abroad had been 1.234 million in 1975. A study of the impact of emigration upon achievement of development objectives, published in March 1976, noted that the numbers emigrating had increased since the time of the February 1975 census.

Government perception of levels and trends of emigration

In his speech delivered to the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative stated that the current level of emigration represented a problem. The great majority of emigrants were economically active males, and their absence from the labour force was described as "a major obstacle that hinders our productive development programmes." The problem was stated to be "a natural consequence of the conditions of instability, poverty and backwardness that prevailed in the reign of the Imamite dynasty". It was acknowledged that such emigration constituted a "democratic safety-valve", although not in the sense of its immediate impact upon size of labour force, but rather in its impact upon current fertility and hence upon future rates of population growth. However, in its national report prepared for the United Nations Conference on Human Settlements, and transmitted in June 1975, the Government noted that emigrant remittances had provided a considerable part of the funds used to stimulate economic development. Although no explicit statement was made of the Government perception of continuation of such large-scale movement, it may be presumed that, for the short-term at least, and in the context of high land pressure and inability to expand the urban sector sufficiently to absorb all potential rural out-migrants, the Government perceived emigration to be acceptable.

In a note on the impact of emigration upon development published in March 1976, it was reported that the shortage of skilled workers had seriously constrained achievement of the three-year development programme for 1973-1976, and was expected to have a similar impact upon the succeeding four-year plan. Large numbers of Yemenis had learned skills abroad, and had not yet been attracted home to work in

the small modern sector. Although concerned with this aspect of emigration, the Government considered the large-scale emigration of less skilled workers to be beneficial in current circumstances, in that their remittances, which in 1974/75 were reported to have been about $220 million, rising to $333 million in 1975/76, more than made up for the large trade deficit in remaining sectors. It may be noted that United Nations sources have indicated a strong seasonal rhythm to emigration, indicating the possibility that agricultural work in the traditional sector might not be seriously affected. Yet, in its reply to the United Nations Third Population Inquiry transmitted in April 1976 the Government stated that because of insufficient information, it had not formulated its perception of the extent to which current levels of emigration contributed positively or negatively to the achievement of the objectives of development.

Policy with regard to emigration

It was reported in an American newspaper in December 1973 that the Government of Saudi Arabia encouraged Yemeni emigration, and made travel and the remittance of funds easy. At the World Population Conference the Government stated that steps were being taken to limit emigration. In his speech at the United Nations World Population Conference held at Bucharest in August 1974 the Government's representative stated that the Government was then realizing the consequence of emigration levels, and was trying as far as possible to limit it while attempting to bring back emigrants to participate in development at home. He called upon the Governments of countries of their destination to provide satisfactory conditions for their work and living. However, it indicated no intention to intervene to modify levels of emigration in its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, which contained substantial discussion of general development problems and policies.

In December 1975 it was reported that the Government had undertaken to establish a ministry to look after the interests of Yemeni emigrants. Because of insufficient information, the Government indicated in its reply to the Third United Nations Population Inquiry that it had not formulated a policy with regard to emigration. Moreover, it stated that it had no policy designed to secure the return of emigrants in order to resolve the problem known as the "brain drain".

In a study of the impact of emigration upon the achievement of the Government's development objectives, published in March 1976, it was stated that the Government actively encouraged unskilled men to emigrate, principally in order to earn foreign exchange. However, it encouraged the permanent return of those who had acquired skills and experience in the modern sector.

Spatial distribution

Information available to the Government

In 1971 the Government reported that the area of arable land represented nearly 10 per cent of the total area. In 1974 it noted that the estimated size of the national territory was 200,000 square kilometres. Arable land was estimated to be 15,150 square kilometres, and a further 20,000 square kilometres was considered of marginal value. In 1973 the Central Bank reported that the Ministry of Agriculture had undertaken a study of the effects of the drought and had identified an agricultural area of 1.5 million acres, of which 85 per cent was rainfed.

In August 1974 the Government's representative at the World Population Conference held at Bucharest stated that 90 per cent of the population were resident in rural areas, with the same proportion engaged in agriculture. In its national report prepared for the United Nations Conference on Human Settlements the Government also reported that an estimated 90 per cent of the total population was resident in rural areas, with from 80 to 90 per cent of the active population engaged in agriculture. The greater proportion of the population was resident in the southern uplands which--receiving up to 1,000 mm of rainfall annually--were the most productive, and in the western slopes and the highlands. Limited numbers were resident in the Tihama.

In its national report for the United Nations Conference on Human Settlements the Government noted the long history of urbanization in the country, and the well developed urban regional system. First rank cities were identified by the Government as including Sana'a, Ta'izz, and al-Hudaydah. Third-order cities include Umran, Hajjah, Sa'dah, Rida' and al-Bayda. In a survey of the situation in the country published in December 1972 in a foreign review, it was reported that the 1971 estimated population of Sana'a had been 140,000, that of al-Hudaydah, 110,000 and that of Ta'izz, 90,000. In 1972 the population of the metropolitan centre and political capital, Sana'a, based upon a socio-demographic survey, was stated to be only 89,000. The Government used an estimated total urban population of 360,000 for 1973 for the purpose of estimating its national accounts for 1972/73. Sana'a had a total of 115,000, al-Hudaydah, 75,000 and Ta'izz, 72,000. The February 1975 census indicated 300,000 inhabitants resident in the three major centres: Sana'a, 135,000; al-Hudaydah, 80,000; and Ta'izz, 78,000.

In a report on urbanization and internal migration presented by the Government in 1974, it stated that until 1969 there had been little internal migration. There were few areas in which the demand for labour had recently increased significantly, a reflection of the very limited extent of modern development. Similarly, the absence of social services was uniform throughout the country. In addition, traditional attitudes to immigrants from outside the immediate neighbourhood was hostile.

Thus movements were limited to responses to poor climatic conditions, particularly on the Tuhama coastal plains. However, in 1971 the Government reported at a regional meeting on demographic statistics, that considerable dispersion of population from areas involved in the civil war had taken place.

However, since 1969 the expansion of investment and the provision of social services, which was almost entirely concentrated in Sana'a, Ta'izz and al-Hudaydah, has stimulated a very substantial internal migration from rural areas to these metropolitan and second order urban centres. A socio-demographic survey of 181 workers at the Sana'a textile mill in September 1971, for which results were published in the 1972 Statistical Yearbook, revealed that 44.8 were born in the city, and 27.1 per cent in the remaining areas of the Sana'a Governorate. Only 28 per cent had been born in other governorates. In its national report for the United Nations Conference on Human Settlements the Government stated that, although no internal migration data was available, it was known that considerable movement to the three major urban centres was occurring in response to a development boom there and to the shortage of land in the more densely settled southern uplands and western slope regions. In most cases this migration had been absorbed within the cities without the development of major problems, other than that of the provision of utilities and infrastructure.

In April 1978 the Population Division of ECWA reported that, on the basis of the provisional results of the 1975 census, the proportion of the total population resident within what was term the "capital agglomeration" was 17.3 per cent.

Government perception of spatial distribution

In his speech at the United Nations World Population Conference held at Bucharest in August 1974, which dealt with most other aspects of the demographic situation in the country, the Government's representative made no statement concerning the acceptability of the spatial distribution of the population. This may be taken to indicate a view that it constituted no serious problem. Indeed, in December 1974 it was reported that the Government considered continued rural to urban migration to be appropriate and necessary during the present very early phase of development. This was partly because the urban system was insufficiently developed to perform the functions required of it in the context of the current planned national development, and hence urban functional expansion would require continued population expansion, and partly also because of an overconcentration of the labour force in the agricultural sector. The establishment of a modernized administration, a national university and other higher education institutes, of industries, and economic and social services within higher order urban centres was considered necessary. Major investments were planned in the provision of water and drainage for the three largest urban centres.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, the Government stated that it perceived the problems facing the 90 per cent of the population resident in rural areas to be of paramount importance. Because of this predominance, and the limited potential for expansion of any other sector, improvement of living standards for the vast majority of the population would depend upon the resolution of problems facing the rural economy. Major constraints were the erratic rainfall and limited knowledge of water resources, deficient basic institutions and skilled labour, low levels of technology, lack of social overhead infrastructure and "other complex socio-economic and political institutions inherent in a centuries old, basically tribal society". The Government noted the potential for expansion of agricultural land in the eastern slopes "reputedly a rich agricultural region many years ago...now largely a desert". However, realistically, it considered that its major efforts should lie with the improvement of the basic standard of living in the existing settled agricultural regions of the highlands, southern uplands and western slopes, and the development of a more capital intensive irrigated agriculture in the Tihama. In much of the settled area a severe land shortage caused considerable numbers to migrate: previously almost entirely outside the country, but recently because of boom conditions in the major urban centres, also to those centres. The recent urban growth resulted from large inflows of emigrant remittances, foreign project aid, and grants and loans. So far traditional methods of construction, and the building sector in general had been capable of meeting the housing needs of the urban in-migrants, but a difficulty was growing in connexion with the provision of utilities and other infrastructure.

In its first socio-economic report, for the period 1970-1974 and published in 1976, the Government stated that prior to 1970 internal migration had been negligible because of the absence of new employment opportunities and the similarity of conditions throughout the country. Since 1970 urban development had stimulated substantial movement, notably into the principal centres and notably into Sana'a. Such movement was considered to be necessary in existing circumstances. However, it required careful study in order that constraints upon agricultural activities and the rural economy as a whole might not result. Provision of education, health, electricity, water services and rural industries capable of absorbing labour, especially after the peak agricultural seasons, were considered necessary steps to ensure that rural to urban migration remained within acceptable limits.

The Government expressed its view of the function of the rural labour force in the following manner:

> "Rural labour force is taken to be the public reserve of the country's labour force. It provides non-agricultural sectors with their needs in labour...due to the incapacity of other sectors labour either remains in rural areas and raises the unemployment rate

or emigrates to neighbouring countries...In Yemen it reaches 90 per cent of the total labour force. From the above we realize the burden resting on the concerned authorities to raise the capability of the labour force, introducing various plantations and rural industries that absorb surplus labour and save the trouble of both internal and external migration."

In its reply to the United Nations Third Population Inquiry, transmitted by the Government in April 1976, the Government stated that the present distribution of population was appropriate, although requiring minor changes. This was so from the viewpoint of ensuring protection of the environment, utilization of natural resources, employment and well-being of the population within the context of economic and social development. Present rates of population change in the metropolitan region were viewed as contributing positively to the achievement of development in the urban and rural areas of other regions because change was "too slow". However, the Government considered that the positive rates of population growth in rural areas did not constrain development.

Policy with regard to spatial distribution

In 1973 the Central Bank reported that considerable construction was taking place in rural areas on the basis of remittances received from emigrant workers. In its December 1974 statement on urbanization and internal migration the Government said it was aware of the importance of allocating to rural areas sufficient investment for them to keep up with urban development. Thus, although internal migration was considered necessary, it "should be treated carefully so as not to be at the expense of rural areas' interests and agricultural activity". Consequently, the Government had proposed measures for comprehensive rural development which included provision of education, particularly to the poor, provision of health services, electricity and water supplies, with priority to "overpopulated regions", and establishment of rural and agro-industries, particularly those capable of absorbing seasonal unemployment.

Although comprehensive programmes were begun in the coastal Tihama lowlands and in the northern region, the Government continued to emphasize the improvement of basic technology and organization within the densely populated central and southern regions. Thus, in the Tihama lowlands, a UNDP/FAO project was designed to expand irrigated farming in the Wadi Zabid area, in which land and water resources had been surveyed and found to be substantial. However, further surveys were made necessary to establish the most appropriate system of irrigation. In 1973 the Central Bank reported that the northern region, which had been isolated until recently, had not been assigned a specific development project. However, with the construction of an interregional road from Sana'a, it was expected that change would occur. From 1970 UNDP assisted the Highlands and Midlands Farm

Development projects. In May 1975 it reported that the Government was preparing to establish within the Ministry of Agriculture a Southern Uplands Regional Development Unit with assistance from the World Bank. UNDP was assisting in the establishment of a Central Agricultural Research and Training Organization in the southern uplands area.

The Government's representative at the United Nations World Population Conference held at Bucharest in August 1974 made no reference to the Government's policy with regard to the spatial distribution of the population. It may be presumed that the policy at that time was one of non-intervention in the existing situation and trends.

In its national report prepared for the United Nations Conference on Human Settlements and transmitted in June 1975, the Government stated that concern with human settlements was perceived to be an integral part of the unified approach to development. Because of the fact that 90 per cent of the population was still rural, the Government considered that its emphasis must be upon rural settlements, problems facing rural society and finally planning and strategy for rural development. Therefore, emphasis remained upon comprehensive rural development. Agricultural, health, education, and communications projects were perceived as parts of an integrated strategy. These were to include the entire settled area of the country, but major projects were located in the Tihama and in the Southern Uplands in Ta'izz and Ibb provinces.

In its reply to the United Nations Third Population Inquiry the Government stated that it considered the adjustment of the distribution of economic and social activities only (rather than of demographic processes) to be the best means of ensuring that the distribution of population was completely appropriate for development purposes. It had no formulated policy of modifying the demographic factors in either the metropolitan region, or in urban or rural parts of other regions of the country.

However, the Government did not neglect the urban sector, which was undergoing carefully controlled but rapid expansion. UNDP stated in 1974 that the Government was anxious to avoid a repetition of errors made elsewhere in physical planning and especially to prevent uncontrolled urban expansion. Timely intervention was still possible at the present early stage of urban development in Yemen. The recently adopted policy of the Government aimed at exercising the necessary control over the use of land, the establishment of master plans for major cities, promotion of low-cost housing schemes, encouragement of the use of local materials, preservation of the character of local architecture and proper design for the construction of public buildings. In its report prepared for the United Nations Conference on Human Settlements the Government stated several aspects of policy related to urban centres; it noted in particular that in traditional

society housing and related infrastructure in urban areas had been provided adequately by traditional methods, and that this had been capable of employing considerable numbers of skilled workers and craftsmen. The trend during the previous 10 years in the major urban centres had been to utilize foreign construction methods and materials, to the detriment of the local economy: this trend was being reversed with active Government support. Because of the previous inaccessibility of many parts of the country, the Government stressed the need for substantial improvement in interregional and regional road communications.

In November 1973 it had been reported that a United Nations and World Bank project was designed to support the establishment of industrial complexes in each of the principal urban centres. The Government adopted a policy of supporting industrial expansion. In July 1975 UNDP reported that existing industries employed less than 0.5 per cent of the population, and that most establishments were workshops and craft undertakings employing only a few workers. In October 1973 the Government began a full-scale project including an industrial promotion and advisory unit. Attention was given also to improvement of the transportation and communication infrastructure. UNDP has assisted in feasibility studies for port development and for the development of the airport at al-Hudaydah. In February 1976 it was reported that the Government planned to build a new port to replace that at al-Hudaydah. Work was to begin in 1977, financed by the Kuwait Fund for Arab Economic Development.

CONCLUSION

The Yemen Arab Republic is one of the few countries which until recently had avoided the impact of modern technology and societal organization, although the development of countries adjacent to it had brought about a rapid increase in the emigration traditional to the country. The programmes of initial modernization adopted by the Government after the 1962 revolution were not carried out because of the civil war which came to an end only in late 1969. Consequently, the period during which a significant progress had been made in the organization of governmental institutions and a modern economic system, was limited to the 1970s. In such circumstances, the demographic behaviour of the population may be assumed to be relatively unchanged from the pre-modern situation. Available information suggested that this was so, although the beginnings of a decline in morbidity and mortality were likely to have occurred, as had an increased movement into the principal urban centres.

In spite of the absence of reliable information on the demographic situation until the early 1970s, Governments, particularly since 1962, were aware of the implications of that situation for the achievement of their development objectives. They have formulated policies, in certain respects still tentative, which realistically responded to the situation and to the Government's capacity to change it. Strong emphasis was given to an improvement in health status, with supporting nutrition, sanitation and hygienic measures. The consequences for rates of natural increase were acknowledged, and, while current levels of fertility were considered acceptable, the inclusion of a programme of family planning within health services was under active consideration, with a view not only of improving health and welfare, but also of gradually constraining national levels of fertility, and compensating for any undue acceleration of natural increase as mortality declined.

The existing distribution of population within national territory was considered generally acceptable. Increases in productivity and living standards from very low base levels were considered more likely to result from technological and organizational modernization of the population in situ, with limited capital intensive development in appropriate lowland areas, rather than from any significant shift into areas which were known to have supported large populations in the past, but which were unoccupied in the modern period. Accelerating rural to urban movements were considered acceptable, the existence of a traditional but effectively functioning urban system, making possible the absorption of in-migrants without substantial problems.

Second only to the problem of poor health was considered that of emigration. The absence of about 1.2 million men from a total labour force of approximately 3.2 million, of which probably 1.6 million were men obviously represented a very significant economic and demographic fact. Although there was no doubt that remittances

from emigrants were an important element of the country's financial situation, nevertheless, the type of development strategy which emphasized generally small increments in the productivity of traditional technology implied generally labour-intensive measures, requiring full use of the available labour force. In view of so high a proportion absent, a serious constraint upon such development may have existed. Given the continued acceleration in construction, industry and services in adjacent oil-producing countries, and the undoubted attraction for emigration which this represented, the situation was unlikely to be responsive to any attempted Government adjustments.

Yemen: Selected demographic indicators, 1950-2000

Medium variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000)	3622	3982	4429	5016	5767	6668	7741	9000	10445	12054	13753
-- , males (--)	1838	2018	2243	2539	2919	3372	3913	4548	5275	6085	6939
-- , females (--)	1784	1964	2185	2477	2849	3295	3828	4453	5170	5969	6814
Pop. ages 0-4 to total (0/0)	17.1	17.2	17.4	17.9	18.1	18.4	18.3	18.0	17.5	16.7	15.4
-- 5-14 --	25.3	25.6	25.9	26.0	26.0	26.2	26.8	27.2	27.2	27.0	26.6
-- 15-64 --	54.6	54.3	54.0	53.4	53.2	52.6	52.1	51.9	52.4	53.3	54.9
-- 65+ --	3.0	2.8	2.7	2.7	2.7	2.7	2.8	2.8	2.9	3.0	3.2
-- under 20 --	52.5	53.2	53.6	54.2	54.4	54.8	55.2	55.5	55.3	54.4	52.9
Women ages 15-49 to females (0/0)	46.9	46.7	46.5	46.0	45.7	45.2	44.8	44.7	45.1	46.0	47.4
Dependency ratios (per 1000)	831.4	842.5	851.3	870.9	880.0	901.1	919.9	925.1	908.8	876.2	822.6
Child-woman ratios (per 1000)	739.8	748.3	757.4	788.8	801.9	825.0	828.1	815.5	782.5	731.5	655.0
Sex ratios (per 100 females)	103.0	102.8	102.6	102.5	102.5	102.3	102.2	102.1	102.0	101.9	101.8
Median ages (years)	18.8	18.5	18.3	18.0	17.9	17.6	17.4	17.3	17.5	17.9	18.7
Proportion of urban (0/0)	2.1	2.8	3.8	5.2	7.0	8.9	11.0	13.3	15.7	18.1	20.4
Population density (per sq.km.)	19	20	23	26	30	34	40	46	54	62	71
	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	
Rates of growth (0/0)	1.90	2.12	2.49	2.79	2.90	2.99	3.01	2.98	2.87	2.64	
Natural increase rates (0/00)	19.0	21.2	24.9	27.9	29.0	29.8	30.1	29.7	28.6	26.3	
Crude birth rates (--)	50.9	50.7	50.7	50.3	49.6	48.3	46.6	44.4	41.4	37.4	
Crude death rates (--)	31.9	29.5	25.8	22.4	20.6	18.5	16.6	14.7	12.8	11.1	
Gross reproduction rates	--	--	--	--	3.50	3.45	3.35	3.17	2.90	2.53	
Net reproduction rates	--	--	--	--	2.30	2.38	2.41	2.37	2.26	2.04	
Total fertility rates (0/00)	--	--	--	--	7176	7074	6868	6500	5946	5185	
General fertility rates (--)	220.3	220.8	222.3	222.2	220.7	217.4	210.9	199.5	183.5	161.7	
Life expectancy, males (years)	34.2	36.6	38.9	41.4	43.7	46.1	48.5	50.8	53.2	55.5	
-- , females (--)	35.3	37.9	40.5	43.3	45.9	48.6	51.2	53.8	56.5	59.0	
-- , total (--)	34.7	37.2	39.7	42.3	44.8	47.4	49.8	52.3	54.8	57.2	

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High variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000)	3622	3982	4429	5016	5767	6668	7762	9067	10609	12394	14395
-- , males (--)	1838	2018	2243	2539	2919	3372	3924	4581	5359	6258	7265
-- , females (--)	1784	1964	2185	2477	2849	3295	3838	4485	5251	6136	7129
Pop. ages 0-4 to total (0/0)	17.1	17.2	17.4	17.9	18.1	18.4	18.5	18.4	18.2	17.7	16.9
-- 5-14 --	25.3	25.6	25.9	26.0	26.0	26.2	26.7	27.2	27.4	27.4	27.3
-- 15-64 --	54.6	54.3	54.0	53.4	53.2	52.6	51.9	51.6	51.6	52.0	52.9
-- 65+ --	3.0	2.8	2.7	2.7	2.7	2.7	2.8	2.8	2.9	2.9	3.0
-- under 20 --	52.5	53.2	53.6	54.2	54.4	54.8	55.3	55.8	56.0	55.7	54.8
Women ages 15-49 to females (0/0)	46.9	46.7	46.5	46.0	45.7	45.2	44.6	44.4	44.4	44.9	45.7
Dependency ratios (per 1000)	831.4	842.5	851.3	870.9	880.0	901.1	925.0	939.2	938.9	923.5	892.1
Child-woman ratios (per 1000)	739.8	748.3	757.4	788.8	801.9	825.0	840.1	839.2	825.8	794.8	744.0
Sex ratios (per 100 females)	103.0	102.8	102.6	102.5	102.5	102.3	102.2	102.1	102.1	102.0	101.9
Median ages (years)	18.8	18.5	18.3	18.0	17.9	17.6	17.3	17.2	17.1	17.3	17.7
Proportion of urban (0/0)	2.1	2.8	3.8	5.2	7.0	9.0	11.4	14.1	17.0	20.2	23.6
Population density (per sq.km.)	19	20	23	26	30	34	40	46	54	64	74
	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	
Rates of growth (0/0)	1.90	2.12	2.49	2.79	2.90	3.04	3.11	3.14	3.11	2.99	
Natural increase rates (0/00)	19.0	21.2	24.9	27.9	29.0	30.3	31.0	31.4	31.0	29.9	
Crude birth rates (--)	50.9	50.7	50.7	50.3	49.6	49.0	47.8	46.3	44.2	41.4	
Crude death rates (--)	31.9	29.5	25.8	22.4	20.6	18.6	16.7	14.9	13.1	11.5	
Gross reproduction rates	--	--	--	--	3.50	3.50	3.45	3.35	3.17	2.90	
Net reproduction rates	--	--	--	--	2.30	2.41	2.48	2.51	2.47	2.34	
Total fertility rates (0/00)	--	--	--	--	7176	7176	7074	6868	6499	5946	
General fertility rates (0/00)	220.3	220.8	222.3	222.2	220.7	220.6	217.0	210.6	199.7	184.2	
Life expectancy, males (years)	34.2	36.6	38.9	41.4	43.7	46.1	48.5	50.8	53.2	55.5	
-- , females (--)	35.3	37.9	40.5	43.3	45.9	48.6	51.2	53.8	56.5	59.0	
-- , total (--)	34.7	37.2	39.7	42.3	44.8	47.4	49.8	52.3	54.8	57.2	

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Low variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000)	3622	3982	4429	5016	5767	6656	7698	8894	10209	11546	12826
-- , males (--)	1838	2018	2243	2539	2919	3366	3891	4494	5156	5828	6470
-- , females (--)	1784	1964	2185	2477	2849	3289	3806	4400	5053	5718	6356
Pop. ages 0-4 to total (0/0)	17.1	17.2	17.4	17.9	18.1	18.4	18.2	17.8	16.9	15.3	13.5
-- 5-14 --	25.3	25.6	25.9	26.0	26.0	26.2	26.8	27.1	27.1	26.8	25.7
-- 15-64 --	54.6	54.3	54.0	53.4	53.2	52.7	52.3	52.3	53.1	54.9	57.5
-- 65+ --	3.0	2.8	2.7	2.7	2.7	2.7	2.8	2.8	2.9	3.1	3.3
-- under 20 --	52.5	53.2	53.6	54.2	54.4	54.7	55.1	55.2	54.6	53.0	50.4
Women ages 15-49 to females (0/0)	46.9	46.7	46.5	46.0	45.7	45.2	44.9	45.0	45.8	47.3	49.7
Dependency ratios (per 1000)	831.4	842.5	851.3	870.9	880.0	899.2	913.4	911.0	881.5	822.6	737.7
Child-woman ratios (per 1000)	739.8	748.3	757.4	788.8	801.9	821.7	819.2	797.3	744.8	654.0	548.9
Sex ratios (per 100 females)	103.0	102.8	102.6	102.5	102.5	102.3	102.2	102.1	102.0	101.9	101.8
Median ages (years)	18.8	18.5	18.3	18.0	17.9	17.7	17.5	17.5	17.8	18.6	19.8
Proportion of urban (0/0)	2.1	2.8	3.8	5.2	7.0	8.7	10.6	12.5	14.4	16.1	17.5
Population density (per sq.km.)	19	20	23	26	30	34	39	46	52	59	66
	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	
Rates of growth (0/0)	1.90	2.12	2.49	2.79	2.87	2.91	2.89	2.76	2.46	2.10	
Natural increase rates (0/00)	19.0	21.2	24.9	27.9	28.6	29.0	28.8	27.5	24.6	21.0	
Crude birth rates (--)	50.9	50.7	50.7	50.3	49.6	48.3	46.4	43.3	38.4	33.1	
Crude death rates (--)	31.9	29.5	25.8	22.4	21.0	19.3	17.5	15.7	13.9	12.1	
Gross reproduction rates	--	--	--	--	3.50	3.44	3.31	3.05	2.62	2.14	
Net reproduction rates	--	--	--	--	2.27	2.32	2.32	2.21	1.96	1.66	
Total fertility rates (0/00)	--	--	--	--	7176	7053	6786	6252	5371	4388	
General fertility rates (--)	220.3	220.8	222.3	222.2	220.7	216.8	208.4	192.4	166.6	137.6	
Life expectancy, males (years)	34.2	36.6	38.9	41.4	43.2	45.1	47.0	48.9	50.8	52.7	
-- , females (--)	35.3	37.9	40.5	43.3	45.4	47.5	49.6	51.7	53.8	56.0	
-- , total (--)	34.7	37.2	39.7	42.3	44.3	46.3	48.3	50.3	52.3	54.3	

Source: World Population Prospects as Assessed in 1973 (United Nations publication, Sales No. E.76.XIII.4).

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BIBLIOGRAPHY

I. The period 1960-1969

The political and economic situation and development planning, including perceptions and policies with regard to the relationships between demographic behaviour and development

El-Attar, M.S., Le sous-développement économique et social du Yémen: perspectives de la révolution Yéménite. Algiers, Editions Tiers-Monde, 1964. 358 p.

Faroughy, A. Introducing Yemen. New York, Orientalia, 1947. 123 p.

Heyworth-Dunne, G.E. Al-Yemen: a general social, political and economic survey. Cairo, Renaissance Bookshop, 1952. 118 p.

_____. The Yemen. Middle Eastern Affairs (New York), 9:50-58, February 1958.

Seager, B.W. The Yemen. Journal of the Royal Central Asian Society (London), 42:214-230, July and October 1955.

Surieu, R. Problèmes Yéménites. Orient (Paris), no. 7:43-53, 1958.

United Nations. Industrial development in the Arab countries. Selected documents presented to the Symposium on Industrial Development in the Arab countries. Kuwait, 1-10 March 1966. September 1967. 140 p. (ID/CONF.1/RBP/6). Sales No. 66.II.B.23.

Middle East and North Africa, 1977-1978. London, Europa Publications, 1977.

_____. "Yemen Arab Republic", p. 782-797.

Raffaneau, C. L'équipement du Yémen. Industries et travaux d'outre-mer (Paris), 77:273-279, Avril 1960.

Demographic information

Lambardi, N. Divisione amministrative del Yemen. Con notizie economiche e demografiche. Oriente moderno (Roma), 27:143-162, julio-settembre 1947.

Nahas, M.K. The family in the Arab World. Marriage and family living (Mineepolis) 16:293-404, November 1954.

Tarcici, A. Yemen. New York, n.publ., 1947. 96 p.

United Nations. The question of khat. Note by the Secretary-General. 9 March 1959. 2 p. (E/CN.7/371).

Yemen. Technical Office. Statistical data on the Yemen Arab Republic. Sana'a, January 1969. 4-2 p. Compiled by A.N. Dahbar.

Perceptions of demographic behaviour and population policy not previously cited

Fayein, C. Une française médecin au Yémen. Paris, Julliard, 1955. 301 p.

United Nations Children's Fund. for an allocation: Yemen: training. 26 April 1962. Recommendation of the Executive Director basic maternal and child health and 3 p. (E/ICEF/P/L.196).

_____. for an allocation: Yemen: (E/ICEF/P/L.405). Recommendation of the Executive Director applied nutrition. 14 April 1964. 3 p.

_____. for an allocation: Yemen: 1965/1966. 13 April 1965. Recommendation of the Executive Director education, continuation and expansion, 3 p.

_____. for an allocation: Yemen: Continuation and expansion, 26 April 1965. 4 p. Recommendation of the Executive Director basic health services and training. mid 1965-mid 1966. (E/ICEF/P/L.559).

United Nations. General Assembly. Full employment: measures taken by various countries for the purpose of achieving full employment during the six months ending 1 January 1960. 3 July 1950. 5 p. (E/1698/Add.4).

_____. Implementation of full employment, economic development and balance of payment policies. Replies of Governments. 24 May 1954. 111 p. (E/2565/Add.2).

II. The period 1969-1976

The political and economic situation and development planning, including perceptions and policies with regard to the relationships between demographic behaviour and development

Area handbook for the Yemens. Washington, D.C., American University, 1977. 266 p.

Aroudah, Y. La planification et le plan triennal. Economie et finances des Pays Arabes (Beyrouth), 14:28-37, novembre 1971.

Gusarov, V.I., Sejful muljukov, A.M. Ekonomika Iemenskaia arabskaia respublika: spravochnik. Moskva, Nauka, 1972, 119 p.

Kotlov, L.N. Iemenskaia arabskaia respublika: spravochnik. Moskva, Nauka, 1971. 287 p.

Les objectifs prioritaires de développement. Industries et travaux d' outre-mer (Paris) 23:471-474, juin 1975, no. 259.

Stephens, R. The Arab's new frontier. London, Temple Smith, 1973. 256 p.

The Yemen Arab Republic: a MEED special report. Middle east economic digest (Paris), 16:1-15, 8 December 1972, no. 49.

United Nations. Conference on Human Settlements: Habitat. Vancouver, Canada. National report. (A/CONF.70/NR/47)

_____. Development Programme. Large-scale project approved for the Government of Yemen. Institutional support to the Ministry of Economy (Special measures). 23 May 1974. 2 p. (DP/PROJECTS/389).

_____. Development Programme. Governing Council. Country and intercountry programming. Yemen. UNDP assistance requested by the Government of Yemen Arab Republic. (DP/GC/YEM/R.1).

Yemen. Central Planning Organization. Afaq wa mashru'at muqtarahah li altanmiyah fi al-Jumhuriyah al-'Arabiyah al-Yamaniyah. (Prospects and proposed projects for development in the Yemen Arab Republic). Sana'a, october 1972. 30 p.

_____. Central Planning Agency. Foreign loans and aid which the Yemen Arab Republic is receiving or has already obtained. no. 3. Sana'a, November 1973, 33 p.

_____. _____. The three years development programme, 1973/74-1975/76. Sana'a, 197 . 167 p.

Yemen. Central Bank of Yemen. Annual report, 1972-1973. Sana'a, 1973. 166 p.

_____. The national accounts of Yemen Arab Republic, 1969-1973. Sana'a, 1974. 101 p.

Demographic information

Al Thawrah (Sana'a). 30 December 1973.

Courbage, Y. and Fargues, P. La population des pays arabes d'orient. Population (Paris), 30:1111-1142, novembre-décember 1975.

United Nations. Development Programme. Large-scale project approved for the Government of Yemen: Director of Central Statistical Department (OPAS), Sana'a. 23 May 1974. 2 p. (DP/PROJECTS/64).

_____. Economic and Social Office in Beirut. Expert Group Meeting on Traditional and new techniques of data collection in demographic statistics. 29 November-9 December 1971, Beirut, Lebanon. Population census in the Yemen Arab Republic. 6 December 1971. 14 p. (ESOB/DEM.STAT/CP.8). Prepared by H.A. Al-Hayami, Chief of the Statistical Office, Technical Office.

_____. Economic and Social Office in Beirut, and World Health Organization, Regional Office for the Eastern Mediterranean, Alexandria (WHO-EMRO). Expert Group Meeting on Mortality. Beirut, Lebanon, 4-8 December 1972. A brief report on statistical activity and the mortality situation in Northern Yemen. 4 December 1971. 4 p. (ESOB-WHO EMR/MORT/CP.13). Prepared by A. Showje, Department of Statistics, Central Planning Organization.

_____. Economic Commission for Western Asia. First regional population conference, Beirut, Lebanon, 18 February - 1 March 1974. The population census in Yemen Arab Republic. 20 February 1974. 10 p. (ECWA/POP.CON.1/CP.8).

_____. Economic Commission for Western Asia. Demographic and related socio-economic data sheets for countries of the Economic Commission for Western Asia. January 1978. 22 p.

Yemen. Central Planning Office. Statistics Department. Report on the first round of the family budget survey in Sana'a. Sana'a, 1973.

_____. Central Planning Office. Statistics Department. Statistical Yearbook, 1974-1975 (Fourth and Fifth Year). Sana'a, 1975. 212 p.

_____. Central Planning Organisation. Statistical Yearbook 1973. Sana'a, 1978. 205 p.

_____. Central Planning Organisation. Statistical Yearbook, 1972. Sana'a, April 1972. 172 p.

Yemen. Planning Board. Statistical Yearbook, 1971. Sana'a, September 1971. 133 p.

_____. Planning Board. Central Statistical Office. Statistical Yearbook, 1970-1971. Sana'a, 1970.

_____. Central Planning Organization. The housing and population census. February 1975. Sana'a 1975. 13 p.

_____. Central Planning Organisation. Statistics Department. Statistical Yearbook, 1976 (Sixth year). Sana'a, 1976. 184 p.

Dostal, W. Sozio-okonomische Aspekte der Stammes demokratiein Nordost-Yemen. Sociologus (Berlin). 24:1-15, 1974.

Bornstein. A. Some observations on Yemen food habits. FAO nutrition newsletter. (Rome), 10:1-9, July-September 1972.

_____. The Young Child in Yemen. Les carnets de l'enfance Genève. 28:29-42, octobre-décembre 1974.

Perceptions of demographic behaviour and population policy not previously cited

International Planned Parentood Federation. Situation report: Yemen Arab Republic. London, January 1972. 2 p.

_____. Situation Report. Yemen Arab Republic. London, July 1973. 2 p.

_____. Report to Donors. London, October 1974. p. 386.

Milmo, S. North Yemen faces dilemma over migrant labour. Middle east economic digest (London). 20:5-6. March 1976, no. 11.

United Nations. Development Programme. Large-scale project approved for the Government of Yemen: water supply and sewage system for Sana'a and Hodeidah (Phase II) (DP/PROJECTS/31).

_____. Large-scale project approved for the Government of Yemen: Health Manpower Institute, Sana'a, (Phase II).(DP/PROJECTS/31).

_____. Large-scale project approved for the Government of Yemen: Health Manpower Institute, Sana'a (Phase II). (DP/PROJECTS/550)

_____. Large-scale project approved for the Government of Yemen: hospital administration and nursing services. (DP/PROJECTS/551)

United Nations. Large-scale project approved for the Government of Yemen: strengthening of the Rural Water Supply Department, Ministry of Public Works. (DP/PROJECTS/640).

Information, perception and policy on spatial distribution of population

United Nations. Development Programme. Approval of large-scale UNDP assistance to a project of the Government of Yemen: industrial promotion and advisory unit. 27 May 1974. 2 p. (DP/PROJECTS/828). And supplementary assistance. 27 May 1957.

_____. Large-scale project approved for the Government of Yemen: investment feasibility study for ports development in Yemen. (DP/PROJECTS/599).

Chelhod, J. Les cérémonies du mariage au Yémen. Objets et mondes (Paris). 13:3-34, 1973.

_____. L'organisation sociale au Yémen. L'ethnographie (Paris), no. 64:61-86, 1970.

Simmonds, W.A. Women are astir in the land of Sheba. UNESCO features (Paris), nos. 703-704:25-26, 1976.

Stookey, R.W. Social structure and politics in the Yemen Arab Republic. Middle east journal. 28:248-260, 409-418, 1974.

Bibliographies

Macro, E. The Yemen. Journal of the Royal Central Asian society (London). 45:43-51, January 1958.

_____. Bibliography on Yemen and note on Mocha. Coral Gables, Florida, University of Florida Press, 1960. 63 p.

Use was made also of various issues of Arab Report and Record and the Population Bulletin of the United Nations Economic Commission for Western Asia (formerly the United Nations Economic and Social Office in Beirut).

Mondesir, S.L. Compiler. A select bibliography of Yemen Arab Republic and People's Democratic Republic of Yemen. Durham, 1977. 59 p. Durham University Centre for Middle Eastern and Islamic Studies. Occasional papers series, 5.

_____. Economic Commission for Western Asia. Expert Group Meeting on Demographic Aspects of Urbanization and Internal Migration, Beirut, Lebanon, 9-13 December 1974. Urbanization and internal migration: current situation, levels and trends in the Yemen Arab Republic. 5 p. 9 December 1974. (E/ECWA.POP/WG.2/22). Prepared by A. Habbab, Director of Statistics, Central Planning Organisation.

Litho in United Nations, New York

30218–December 1978–4,500